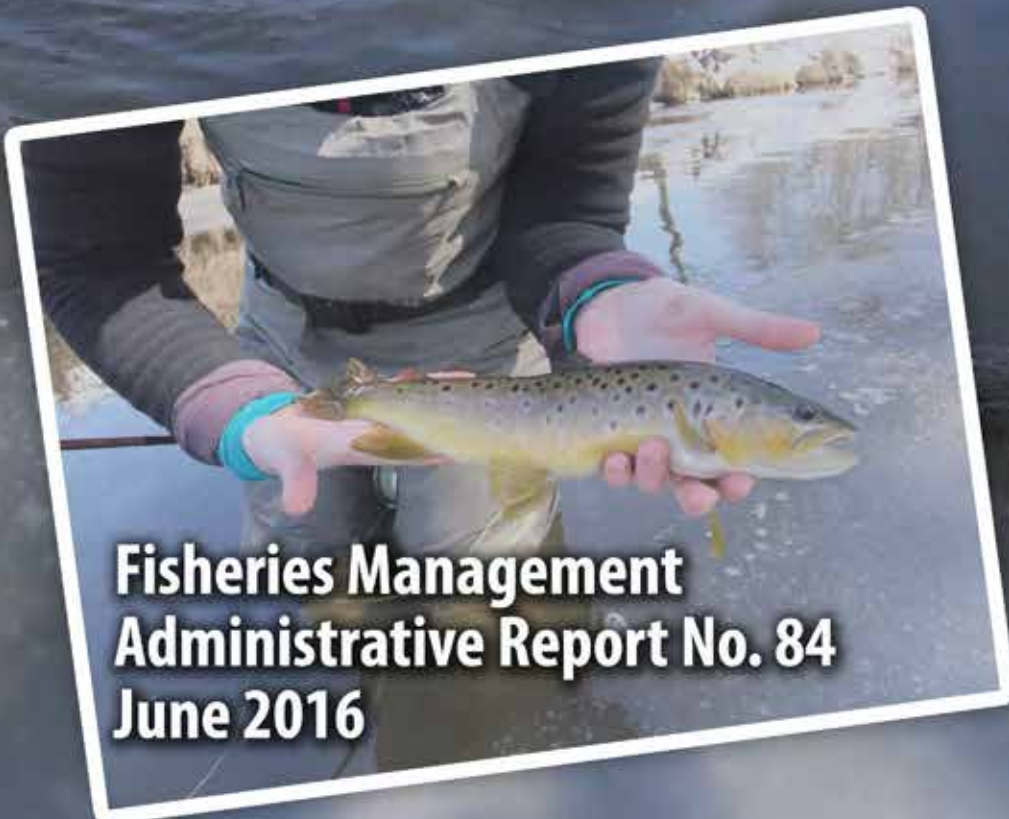


Expenditures of Inland Water Trout Stamp Revenues Fiscal Years 2013-2014



**Fisheries Management
Administrative Report No. 84
June 2016**

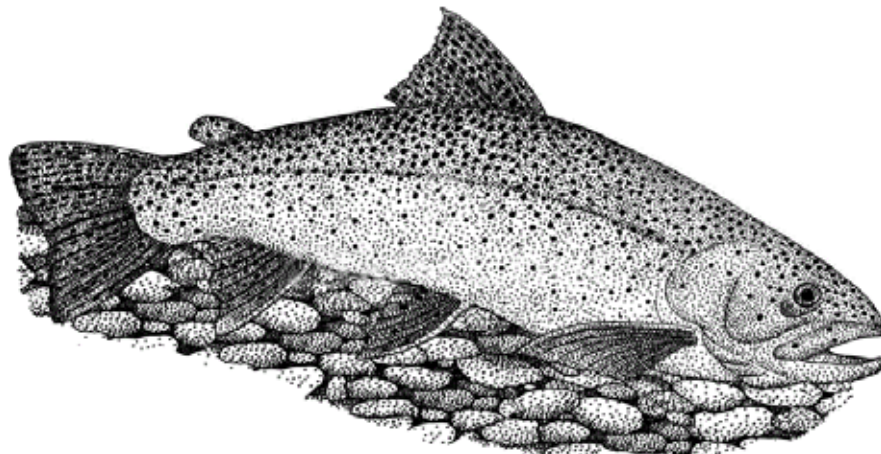


Expenditures of Inland Water Trout Stamp Revenues

Fiscal Years 2013-2014

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History of the Inland Waters Trout Stamp Program

The Wisconsin Department of Natural Resources has a long history of successful trout stream habitat management. Work began with the federal work programs in the 1930s and improved as more successful methods were developed over the history of the program. Only limited work could be accomplished due to limited funding (\$140,000). In 1977, the inland waters trout stamp (IWTS) program was created to provide additional funding for improving and restoring trout habitat and to provide increased trout fishing opportunities.

The cost of the trout stamp has increased from \$2.50 during 1978-1983, to \$3.25 during 1984-1991, to \$7.25 during 1992-2006, and currently is \$10.00 (since 2006).

The number of trout stamps sold averages 140,567 stamps annually over the last 5 years. The total revenue averages \$1,538,985 over the last 5 years. In addition, Patron License holders (currently about 46,000 support the IWTS program (Table 1).

DNR biologists and technicians have used trout stamp dollars to improve and maintain over 25

miles of stream and 1 spring pond per year. An average of \$578,928 in fiscal years 2013 and 2014 was spent on inland trout habitat from general fishing license fees and partner funds (Table 2).

This document summarizes expenditures of the IWTS and other trout habitat expenditures from the fisheries program for fiscal years 2013 and 2014 (July 1, 2012 – June 30, 2014). IWTS contributions, fishing license revenues, grants, gifts and federal funds also support this program.

Many of the DNR personnel working on trout habitat projects are not paid by trout stamp funds, representing a significant amount of non-trout stamp dollars supporting trout habitat work

Since 1992, these funds have included maintenance of habitat improvements, which is vital to insuring the long-term benefits of habitat work. Trout population surveys were added as a viable use in 1998. Surveys are very important for planning habitat improvement projects and evaluating the results of funded projects on trout populations.

Federal Sport Fish Restoration (SFR) money has been used to do trout surveys since 2004. In 2013 and 2014 an average of \$982,719 in state

Table 1 -- License sales contributing to the inland waters trout stamp account

Year	Patron Card	Trout Stamp	Total Trout Anglers	Total Revenues
1978	N/A	183,185	183,135	\$244,459
1979	N/A	183,447	183,447	\$393,912
1980	N/A	187,958	183,958	\$420,403
1981	N/A	194,873	194,873	\$445,189
1982	N/A	194,658	194,658	\$440,949
1983	N/A	190,821	190,821	\$424,617
1984	N/A	192,510	192,510	\$503,337
1985	218	181,960	182,178	\$548,513
1986	264	182,354	182,618	\$550,349
1987	398	180,096	180,494	\$544,367
1988	254	177,138	177,392	\$674,422
1989	449	162,447	162,896	\$723,358
1990	756	131,910	132,666	\$401,174
1991	539	113,640	114,179	\$346,440
1992	847	131,008	131,855	\$647,594
1993	13,486	131,308	144,794	\$971,516
1994	24,757	135,425	160,182	\$1,044,839
1995	34,942	130,701	165,643	\$1,066,710
1996	43,370	136,687	180,057	\$1,107,057
1997	48,368	127,840	176,208	\$986,760
1998	55,579	129,385	184,964	\$1,008,113
1999 ¹	89,114	184,526	273,640	\$1,553,033
2000	76,175	140,603	216,778	\$1,019,645
2001	81,211	142,449	223,660	\$1,180,221
2002	82,615	142,633	225,248	\$1,157,984
2003	80,851	143,405	224,256	\$1,166,441
2004	74,587	137,828	212,414	\$1,126,266
2005	69,979	133,441	203,420	\$1,147,805
2006	59,974	129,194	189,168	\$1,782,603
2007	56,676	130,119	186,795	\$1,495,230
2008	55,159	136,836	191,995	\$1,504,428
2009	50,752	146,803	197,555	\$1,618,053
2010	46,837	140,576	187,413	\$1,569,374
2011	44,952	137,731	182,683	\$1,498,739
2012	44,049	140,830	184,879	\$1,570,291
2013	45,585	141,967	187,552	\$1,506,574
2014	46,633	141,729	188,362	\$1,549,946

¹A spike in sales occurred in FY 99 due to implementation of the Automated License Issuance System (ALIS).

and federal funds per year (excluding costs associated with general hatchery operations) was spent on inland trout propagation and stocking, and about \$785,250 per year was spent on trout surveys.

Guidelines for the use of Inland Waters Trout Stamp revenues

Wisconsin State Statute 29.2285 (1)(e) states: "The Department shall expend the receipts from the sale under this subsection of inland waters trout stamps on improving and maintaining trout

Table 2. Expenditures of inland waters trout stamp revenue and general license fees supporting trout habitat work in fiscal years 2011-2014.

Funding Source	Expenditures			
	FY 11	FY 12	FY 13	FY 14
Trout stamp				
Permanent salaries	\$354,970	\$324,745	\$326,652	\$332,640
LTE salaries	\$211,132	\$281,616	\$239,671	\$246,305
Fringe benefits	\$251,260	\$245,017	\$238,218	\$238,877
Supplies and services	\$724,070	\$667,886	\$596,169	\$573,756
Total trout stamp	\$1,541,433	\$1,519,264	\$1,400,709	\$1,391,578
Other funds				
General license fees	\$341,625	\$398,574	\$409,159	\$233,284
Partner funds - grants	\$233,731	\$196,166	\$316,007	\$199,406
Total Other funds	\$575,356	\$594,740	\$725,166	\$432,690
GRAND TOTAL	\$2,116,790	\$2,114,004	\$2,125,875	\$1,824,267

¹ Fringe benefits only permanent fringe.

² Salaries and benefits are only included once.

habitat in inland trout waters, conducting trout surveys in inland trout waters and administering this subsection.” In addition to specifying trout species, these statutes define the geographic and program requirements of the IWTS Program.

Geographical Requirement: Projects that use trout stamp revenues must be geographically focused on Wisconsin’s inland trout waters. These revenues may not be used on portions of Great Lakes tributaries that are only accessible to anadromous trout and salmon.

Program Requirement: Projects funded by IWTS money must specifically relate to inland trout habitat management (improving and maintaining habitat) or to conduct trout surveys. Expenditures for trout surveys are limited to not more than 10% of the habitat management budget. Surveys authorized must be limited to trout surveys of inland waters. Surveys funded to date include those designed to plan and evaluate habitat improvement projects, wild trout stocking, trout genetics and regulations.

Table 3. Annual Inland Waters Trout Stamp account activities, fiscal years 2011-2014.

	FY 11	FY12	FY13	FY14
Beginning cash balance	\$394,004	\$351,350	\$402,377	\$508,242
Revenues	\$1,498,739	\$1,570,291	\$1,506,574	\$1,549,946
Total available funds	\$1,892,783	\$1,921,641	\$1,908,951	\$2,058,188
Total expenditures	\$1,541,433	\$1,519,264	\$1,400,709	\$1,391,578
Cash balance	\$351,350	\$402,377	\$508,242	\$666,611

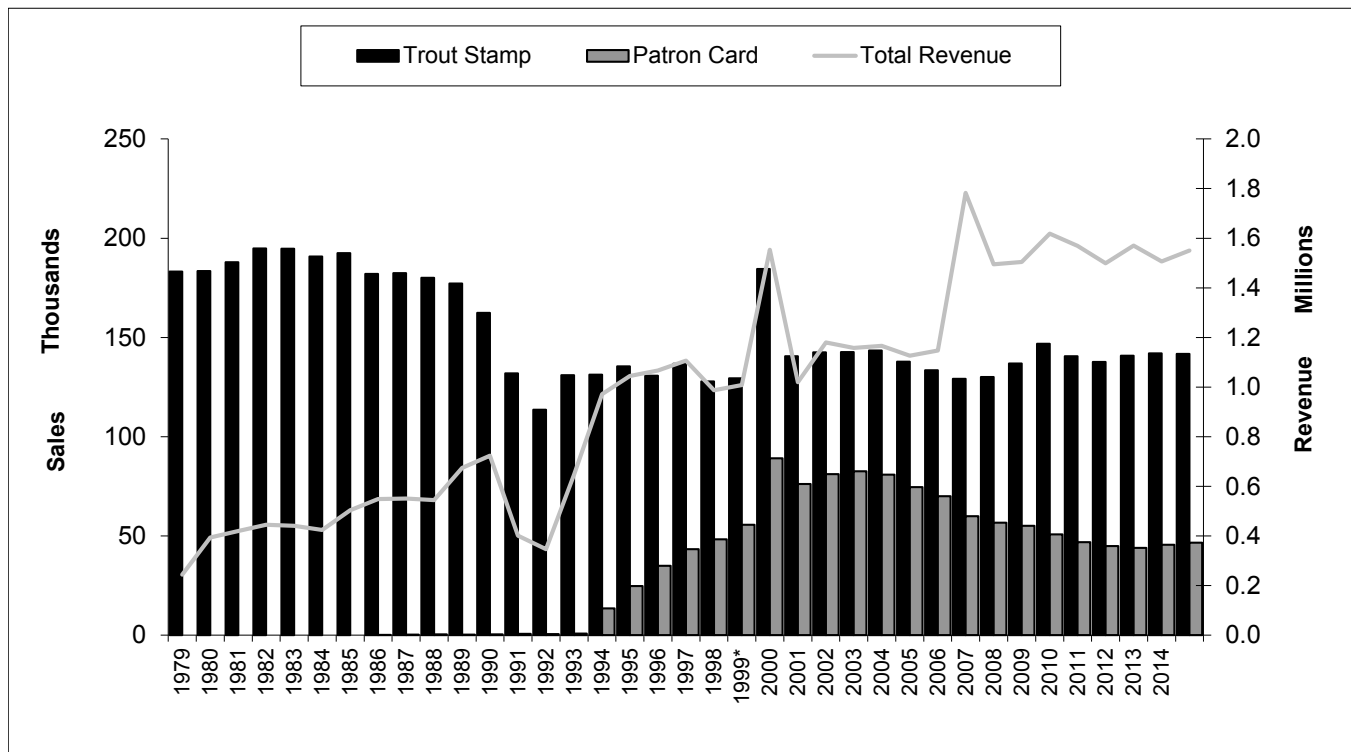


Figure 1. Trout stamp, patron sales and total license revenue from 1978 - 2014. The spike in sales in 1999 was due to implementation of the Automated License Issuing System (ALIS). The spike in revenues in 2006 was due to the fee increase and a rebate from the surplus in the heavy equipment pool.

Habitat management encompasses activities such as maintaining trout streams, improving existing streams and restoring streams capable of sustaining trout populations. Beaver control projects may be funded as part of habitat management. The purchase of equipment to conduct this work is also authorized.

Sources of Revenue for the Inland Trout Stamp Account

All receipts from the sale of IWTS are placed in the IWTS Account. IWTS revenues, sales of patron licenses and collector stamps, General fishing license fees, federal Sport Fishing Restoration (SFR) funding and donations all support the inland trout program.

Currently the cost of each IWTS is \$10.00. The IWTS Account receives about \$3.40 for each Patron License sold. The price of each license to the consumer includes the base price of the license plus a fee that goes to the vendor. The vendor’s fee is \$.75 for the patron license and \$.25 for the

IWTS. Calculations and references in this report exclude vendor’s fees. In addition, collectors can purchase souvenir IWTS from previous years. All revenues from these sales contribute to the IWTS account (Figure 1, Table 1).

Table 3 shows that we usually have a cash balance of funds that are not spent each year. This could be due to weather, flooding, position vacancies, timing of reporting, or increase in revenue from stamp increases or rebates from other programs. These funds are added to revenues the next year to give us total available funds.

We commit between 8 – 9.34 full time equivalents (FTE) positions funded by trout stamp. Any additional hours spent on eligible activities are billed to the Department’s Fish and Wildlife account which is supported by general fishing and hunting license sales. Table 4 shows Fisheries Program person-hours (FTE = full time equivalents) of time spent on habitat projects in each fiscal year. By law, permanent staff hours spent working on non-trout projects cannot be

billed to the IWTS account. Limited Term Employees (LTEs) are not included in this total.

Six previous Inland Waters Trout Stamp Expenditure reports have been published. They cover the fiscal years 1998-2001, 2000-2003, 2002-2005, 2004-2007, 2008-2010 and 2011-2012.

Table 4. Time coded to Trout Stamp projects by permanent employees by fiscal year. FTE's are full-time equivalents, or person-years of time (hours/1825).

Year	Permanent FTEs
FY 2011	11.26
FY 2012	12.37
FY 2013	11.15
FY 2014	9.43



TROUT HABITAT IMPROVEMENT PROJECTS FUNDED BY TROUT STAMP IN 2013-2014

These project reports were taken from annual progress reports and edited for this report. Projects are listed by Field Units and counties.



BLACK RIVER OPERATIONS

2013 Estimated Expenses: \$403,703
 2014 Estimated Expenses: \$348,367

Bear Creek (1) – Pepin County
 Project Length: 2,100 Feet
 Fiscal Year: 2013

Justification and Purpose: Bear Creek suffers from extreme erosion, creating massive sedimentation that limits trout habitat and reproductive success. The project purpose was to stabilize the eroding streambanks, incorporate varied types of trout cover habitat and enhancement structures. The reduction in sediment load, increased velocity, exposed gravel and increased pool

and overhead cover will reduce mortality and increase suitable spawning habitat.

Stream Habitat Impairments: Massive erosion and runoff from extremely high vertical sand banks and the proximity of row crop farming contributing to stream habitat degradation.

Target Species: Brook trout

Technique or Structure: Bank shaping and planting (2,100 ft), LUNKERS (280 ft, 35), grade control measures

Partners: NRCS (materials), Pepin County LCD (materials), Durand Sportsman Association (materials), Clear Water Wisconsin Trout Unlimited (entire project), Durand H.S. Outdoor Science (labor)

Project Length: 1,435 Feet

Fiscal Year: 2014

Justification and Purpose: This reach of stream was historically a mill dam impoundment. After dam abandonment and failure in the 1920's the dam remnants were limited to the dam apron and mixed concrete debris. The stream in recent years undercut and bypassed this remnant material causing a rapid headcut event which created massive slope failure on formerly stable stream slopes. Massive sediment bedload from these vertical slopes jeopardize recent downstream habitat improvements and destroyed what trout habitat present in the affected reach. The project goal was to stabilize this reach and enhance and increase trout habitat.

Stream Habitat Impairments: Massive streambank erosion was present leading to channel sedimentation, lack of pools, poor width to depth ratio and an excessive meander process. What potential woody cover is present rapidly becomes embedded in sand and of no use for cover.

Target Species: Brook and brown trout

Technique or Structure: Bank shaping and planting (1,300 ft), bank sloping (2,600 ft), boulder clusters (100 ft, 8), brush removal (1,500 ft), channel shaping (600 ft), erosion control hydro seed mulch (1,300 ft), log/brush/rock shelters (350 ft, 15), grade control measures (3), LUNKERS (160 ft, 20), rip rap (3,200 ft), weir (2)

Partners: NRCS (materials – rip rap), Clear Water Trout Unlimited (entire project – volunteers and material), Durand Rod and Gun (entire project – volunteers and materials)

Comments and Accomplishments: project completed.

Coon Creek (Bohemian Valley Cr) (2) – La Crosse County

Site Description: Bud Hanson pasture

Project Length: 70 Feet

Fiscal Year: 2014

Justification and Purpose: The purpose of this project is to repair 2 machinery crossings.

Stream Habitat Impairments: After numerous years of use by the landowner along with several floods over the years, the machinery crossings were in need of repairs. Rubble buildup below the crossings was removed to lower the water level at the crossings. Material was then added to the bed of each crossing.

Target Species: Brown trout

Technique or Structure: Material removal, stream crossing

Site Description: Mike Evanstad pasture

Project Length: 70 Feet

Fiscal Year: 2014

Justification and Purpose: The purpose of this project is to repair 2 machinery crossings.

Stream Habitat Impairments: After numerous years of use by the landowner along with several floods over the years, the machinery crossings were in need of repairs. Rubble buildup below the crossings was removed to lower the water level at the crossings. Material was then added to the bed of each crossing.

Target Species: Brown trout

Technique or Structure: Material removal, stream crossing

Site Description: Bohemian Valley Creek State Land

Project Length: 70 Feet

Fiscal Year: 2014

Justification and Purpose: The purpose of this project is to repair a machinery crossing and stabilize a stream bank that was eroding.

Stream Habitat Impairments: The machinery crossing needed reshaping along with adding material to the bed. A small stretch of a stream bank was stabilized with large riprap rock which created stream bank cover for trout.

Target Species: Brown trout

Technique or Structure: bank shaping and planting, rip rap, stream crossing (1)

Coon Creek (3) – Vernon County

Site Description: Dale Nelson Easement

Project Length: 3,300 Feet

Fiscal Year: 2013

Justification and Purpose: Stabilize the streambanks. Remove unwanted trees along the stream corridor. Slope and shape the streambanks to open up the floodway. Narrow and deepen the stream channel and create in-stream cover for trout.

Stream Habitat Impairments: The floodway is confined with unstable streambanks. The stream stretches are wide and shallow with very little cover for trout.

Target Species: Brown trout

Technique or Structure: Bank sloping (3,100 ft), boulder retards (33), Rip rap (2,850 ft), log/brush/rock shelters (86), plunge pools (18), weir (5), wing deflector (11).

Partners: Vernon County NRCS provided funds through an EQIP grant

Site Description: Greg Anderson Easement, upstream from CTH KK bridge 230 feet

Project Length: 640 Feet

Fiscal Year: 2013

Justification and Purpose: The purpose of this project is to stabilize the stream banks. This will prevent the stream channel from washing through an oxbow and losing a 600 foot stretch of stream. In addition to stabilizing the stream banks, in-stream cover for trout will be created.

Stream Habitat Impairments: The stream banks are unstable. With the stream bed mainly consisting of sand, there is very little cover for trout.

Target Species: Brown trout

Technique or Structure: Bank sloping (640 ft, 2), boulder retard (7), log/brush/rock shelters (6), plunge pools (2), riprap (640 ft, 2), weir (2)

Site Description: Neprud property – 580 feet upstream from the machinery crossing the back portion of the property

Project Length: 2,450 Feet

Fiscal Year: 2013

Justification and Purpose: Stabilize the streambanks. Remove unwanted trees along the stream corridor. Slope and shape the streambanks to open up the floodway. Narrow and deepen the stream channel and create in-stream cover for trout.

Stream Habitat Impairments: The floodway is confined with unstable streambanks. The stream stretches are wide and shallow with very little cover for trout.

Target Species: Brown trout

Technique or Structure: Bank sloping (2,180 ft), boulder retards (38), Rip rap (1,990 ft), log/brush/rock shelters (34), plunge pools (12), weir (9), wing deflector (8).

Partners: Vernon County NRCS (provided funds to the Coulee Region Trout Unlimited and designed the 580 riprap sites). Coulee Region Trout Unlimited (materials, received NRCS grant, purchased rock and built LUNKERS), Blackhawk Chapter Trout Unlimited (materials – purchased rock and built LUNKERS)

Site Description: State land at Chaseburg – five segments along hiking trail

Project Length: 910 Feet

Fiscal Year: 2013

Justification and Purpose: Stabilize the stream banks and create in-stream cover for trout.

Stream Habitat Impairments: This section of Coon Creek has not received any previous stream work. The Village of Chaseburg constructed a paved hiking trail along Coon Creek. Segments of the stream were eroding and threatening to damage the paved trail. There was very little in-stream cover for trout in this section of stream.

Target Species: Brown trout

Technique or Structure: Bank sloping (910 ft, 5), boulder retard (9), log/brush/rock shelters (11), plunge pools (4), riprap (910 ft, 5), weir (1)

Partners: Village of Chaseburg

Site Description: Neprud – Ron Larson Easement – 475 feet upstream from confluence of Spring Coulee Creek

Project Length: 685 Feet

Fiscal Year: 2014

Justification and Purpose: Stabilize the streambanks.

Remove unwanted trees along the stream corridor. Slope and shape the streambanks to open up the floodway. Narrow and deepen the stream channel and create in-stream cover for trout.

Stream Habitat Impairments: The floodway is confined with unstable streambanks. The stream stretches are wide and shallow with very little cover for trout.

Target Species: Brown trout

Technique or Structure: LUNKERS (5), bank sloping (685 ft), rip rap (685 ft), weir (1), plunge pools (4), boulder retard (20), tree cover (10)

Partners: Coulee Region Trout Unlimited (materials, received NRCS grant, purchased rock, built LUNKERS), Blackhawk Chapter Trout Unlimited (materials, purchased rock, built LUNKERS), Vernon County NRCS (provided grant to Coulee Region TU)

Creek 8-8 (Rundahl Creek) (4) - Vernon County

Site Description: 1,100 feet upstream from CTH P bridge

Project Length: 260 Feet

Fiscal Year: 2014

Justification and Purpose: The purpose of this project was to repair in-stream and stream bank damage that occurred from a major flood.

Stream Habitat Impairments: Five separate stream stretches needed riprap to be repaired to prevent more damage from future flooding. A machinery crossing also received minor repairs.

Target Species: Brook and brown trout

Technique or Structure: bank shaping and planting (260 ft, 5), rip rap (260 ft, 5), stream crossing (1)



Creek 8-8 (Rundahl Creek) -Stream bank damaged by flood

Danuser Creek (5) – Buffalo County

Site Description: Baecker/Palkowski easements

Project Length: 4,500 Feet

Fiscal Year: 2013

Justification and Purpose: Stabilize eroding stream banks and improve in-stream trout habitat with logs, lunkers, weirs. Establish a native grass buffer next to the stream.

Stream Habitat Impairments: Severe stream bank ero-



Creek 8-8 (Rundahl Creek) –Repaired stream bank damaged by flood

sion, lack of instream habitat for trout, spawning areas covered by sediments.

Target Species: Brook trout

Technique or Structure: Brush removal and bank shaping and planting (10,800 ft), overhead bank cover (346 ft, 25).

Partners: NRCS (TU addendum and Farm Bill dollars - rock and heavy equipment), Clear Waters Trout Unlimited (Rock- purchased additional rock for in-stream habitat), Buffalo County (labor, rock, equipment), Waumandee Rod and Gun Club (labor, lumber, assisted with seeding/mulching, structure installation), USFWS (rock, prairie seed for in-stream habitat).

Site Description: Alleman Property

Project Length: 600 Feet

Fiscal Year: 2014

Justification and Purpose: Erosion control, trout habitat

Stream Habitat Impairments: eroded banks, no stream buffer

Target Species: Brook and brown trout

Technique or Structure: bank shaping and planting (1,200 ft), boulder retard (600 ft, 5), brush removal (1,200 ft), LUNKERS (52 ft, 6), log/brush/rock shelters (600 ft, 16), trees/rootwads (15 ft, 3)

Partners: Arcadia FFA, Waumandee Rod and Gun Club, Land owner (labor), Buffalo County, Trout Unlimited, landowner (materials – rock, labor and equipment)

Comments and Accomplishments: project complete

Farmers Valley Creek (6) – Monroe County

Site Description: Steve Ruetten Easement – 2,463 ft below I-90 bridge

Project Length: 25 Feet

Fiscal Year: 2014

Justification and Purpose: Clean out sediment deposition from a machinery crossing on an easement property. Remove a fallen tree from the stream to prevent

potential stream bank erosion.

Stream Habitat Impairments: Sediment was being added to the stream each time machinery would cross the stream.

Target Species: Brown trout

Technique or Structure: Material removal (25 ft, 2), stream crossing (25 ft, 1)

Little Niagara Creek (7) – Eau Claire County

Site Description: University of Wisconsin – Eau Claire campus

Project Length: 1,470 Feet

Fiscal Year: 2013

Justification and Purpose: The project was planned to restore the creek to a natural appearance and enhance the habitat to a level suitable for trout survival. The creek was originally a self-sustaining brook trout stream with a trout hatchery present. As encroachment from university expansion occurred the stream was rechanneled multiple times. Trout habitat and the native population was subsequently destroyed. As part of the most recent university building expansion, funding was provided for restoration of the creek to a semblance of former appearance and potential. The stream was narrowed and meandered the new banks stabilized and fish habitat structures emplaced.

Stream Habitat Impairments: The creek channel was excessive in width and impounded by perched culverts and concrete debris. Hard surface runoff created thermal spikes and a shallow fine sediment filled channel. The exceptional trout creek was relegated to drainage ditch function and appearance.

Target Species: Brook and brown trout

Technique or Structure: Bank shaping and planting (2,940 ft), channel shaping (1,470 ft), erosion control hydro see mulch (2,940 ft), grade control measures

Partners: University of WI Eau Claire (materials, labor)

Comments and Accomplishments: The creek was meandered to a natural appearance and function from the former drainage ditch. 3 plunge pools, boulders and logs were added for fish habitat. The streambanks were armored with riprap which was then covered with soil, seeded and e-matted.

Mormon Coulee Creek (8) – La Crosse County

Site Description: CTH NN Bridge downstream for 650 feet

Project Length: 1,100 Feet

Fiscal Year: 2014

Justification and Purpose: Remove trees and brush (wil-lows) along the stream corridor to open up the flood-way.

Stream Habitat Impairments: Trees and brush have invaded the stream corridor which was restricting the floodway. Floodwater had the potential to do damage to in-stream habitat work that was previously performed.

Target Species: Brown trout

Technique or Structure: Brushing removal (1,100 ft)

North Fork Bad Axe River (9) – Vernon County

Site Description: Esofea Park – 875 feet below bridge

Project Length: 800 Feet

Fiscal Year: 2013

Justification and Purpose: Perform stream maintenance on a section of stream damaged by major flooding. This is a cooperative project with the Vernon County

Stream Habitat Impairments: Previous flooding has damaged LUNKERS structures and rock weirs. The stream banks have eroded making the channel wide and shallow with little cover for trout. Deposition of rubble has filled in the pools.

Target Species: Brown trout

Technique or Structure: Boulder retard (12), plunge pools (4), weir (3), bank sloping (420 ft), log/brush/rock shelters (10)

Partners: Vernon County Parks & Forest (land owner, materials – riprap rock and tress for instream habitat), Trout Unlimited (materials – riprap rock and tress for in-stream habitat).

Project Length: 315 Feet

Fiscal Year: 2013

Justification and Purpose: The purpose of this project was to repair in-stream and stream bank damage that occurred from a major flood.

Stream Habitat Impairments: Pools were filled in with rubble. Large boulders and riprap were displaced. Stream bank soil was washed away.

Target Species: Brook and brown trout

Technique or Structure: Bank shaping and planting (350 ft), material removal (60 ft), plunge pools (60 ft)

Pine Creek (10) – Crawford County

Site Description: Foley Easement

Project Length: 460 Feet

Fiscal Year: 2014

Justification and Purpose: At the request of the easement landowner, two stream banks were stabilized that were starting to erode into an agricultural field. In addition to the bank stabilization, in-stream cover for trout was created.

Stream Habitat Impairments: The project area contains unstable stream banks along with some stretches of the stream are lacking cover for trout.

Target Species: Brown trout

Technique or Structure: Bank shaping and planting (460 ft), rip rap (460 ft), log/brush/rock shelters (6), boulder retard (10), weir (3)

Richland Creek (11) – Crawford County

Project Length: 295 Feet

Fiscal Year: 2014

Justification and Purpose: Clean out and maintain machinery crossing that received damage from a major flood.

Stream Habitat Impairments: A major flood deposited sand, sediment, rocks and woody debris, both in-stream and upland in the area of a machinery crossing which made the crossing impassible. Deposition was removed and the crossing was restored. The floodway in the area of the crossing was cleared and opened up

to reduce the amount of damage that may occur from the next major flood.

Target Species: Brown trout

Technique or Structure: Stream crossing (30 ft, 1), material removal (30 ft)

Reads Creek (12) – Vernon Creek

Site Description: The confluence of Reads Creek and Creek 6-11

Project Length: 1,400 Feet

Fiscal Year: 2014

Justification and Purpose: The purpose of this project is to stabilize the stream banks and create in-stream cover for trout. This is a cooperative project with the Blackhawk Trout Unlimited Chapter (BTUC). BTUC wanted stream work performed on Reads Creek and purchased \$5,000 worth of rock for this project.

Stream Habitat Impairments: The project area contains unstable stream banks with stretches of stream that are wide and shallow with only a few deep holes to provide cover for trout.

Target Species: Brown trout

Technique or Structure: LUNKERS (2), log/brush/rock shelters (19), boulder retard (31), weir (3), stream crossing (2), bank shaping and planting (1,210 ft, 8), rip rap (1,005 ft, 7)

Partners: Blackhawk Trout Unlimited (materials, purchased rock)



Reads Creek before habitat work.

Rush Creek (13) – Crawford County

Site Description: Maintenance – Raymer Easement

Project Length: 250 Feet

Fiscal Year: 2014

Justification and Purpose: Clean out and maintain ma-



Reads Creek after habitat work.

chinery crossing that received damage from a major flood.

Stream Habitat Impairments: A major flood deposited sand, sediment and woody debris, both in-stream and upland in the area of a machinery crossing which made the crossing impassible. Approximately 200 cubic yards of deposition was removed and the crossing was restored. Deposition of rock and rubble was removed from a riffle downstream which brought the water level at the machinery crossing back to its normal state.

Target Species: Brown trout

Technique or Structure: Stream crossing (75 ft, 1), material removal (100 ft, 2)

Site Description: at Kutsche bridge

Project Length: 365 Feet

Fiscal Year: 2014

Justification and Purpose: The purpose of this project was to stabilize the stream banks along with removing trees and sloping the stream banks which would open up the floodway. This will reduce the amount of in-stream damage along with damage to the Kutsche driveway and bridge when flooding occurs. An impassible machinery crossing needed to be restored.

Stream Habitat Impairments: This section of stream has unstable stream banks and the floodway is constricted with trees. The stream banks were in need of landscaping to reduce the risk of new channel formations during a flood.

Target Species: Brown trout

Technique or Structure: material removal (120 ft, 3)

Comments and Accomplishments: Removed 36 cu yds from 3-Traps/Continuing Project

Spring Coulee Creek (14) – Vernon County

Site Description: DNR Neprud State Land from the snowmobile bridge at Nepruds upstream for 1,375 feet

Project Length: 1,375 Feet

Fiscal Year: 2014

Justification and Purpose: Stabilize the streambanks. Remove unwanted trees along the stream corridor. Slope and shape the streambanks to open up the floodway. Narrow and deepen the stream channel and create in-stream cover for trout.

Stream Habitat Impairments: The floodway is confined with unstable streambanks. The stream stretches are wide and shallow with very little cover for trout.

Target Species: Brown trout

Technique or Structure: Bank shaping and planting (1,375 ft), bank sloping (1,375 ft), boulder retard (20), log/brush/rock shelters (20), LUNKERS (14), rip rap (1,375 ft), weir (5), plunge pools (8)

Partners: Coulee Region Trout Unlimited (materials, received NRCS grant, purchased rock, built LUNKERS), Blackhawk Chapter Trout Unlimited (materials, purchased rock, built LUNKERS), Vernon County NRCS (provided grant to Coulee Region TU, designed 580 rip rap sites)

Site Description: 600 feet downstream from Moilien Hill Rd.

Project Length: 175 Feet

Fiscal Year: 2014

Justification and Purpose: At the request of the easement landowner, two stream banks (95' & 80' long) were stabilized that were starting to erode into an agricultural field. In addition to the bank stabilization, in-stream cover for trout was created.

Stream Habitat Impairments: The project area contains unstable stream banks along with some stretches of the stream are lacking cover for trout.

Target Species: Brook and brown trout

Technique or Structure: Bank shaping and planting (175 ft), boulder retard (7), log/brush/rock shelters (5), rip rap (175 ft), weir (2)

Sugar Creek (15) – Crawford County

Site Description: Frank Kazelka easement where the high voltage power lines cross Sugar Creek

Project Length: 95 Feet

Fiscal Year: 2013

Justification and Purpose: The purpose of this project is to install a machinery crossing on Sugar Creek. This will allow the easement landowner to access the south side of his property. This will also allow access to both sides of the easement property when future stream restoration work is performed.

Stream Habitat Impairments: In this section of Sugar Creek the stream banks are unstable and the stream bed consists of sand. The stream is wide and shallow with little or no cover for trout.

Target Species: Brown trout

Technique or Structure: Stream crossing (18 ft, 1), boulder retard (3), weir (1), rip rap (95 ft, 2), bank sloping (95 ft, 2)

Site Description: Maintenance – 11 Easement properties from Brudos easement up to Nestlehoff easement

Project Length:

Fiscal Year: 2014

Justification and Purpose: Repaired damage that was caused by a major flood that occurred in June of 2013.

Stream Habitat Impairments: The majority of the work consisted of cleaning sediment from and repairing 11 machinery crossings for 11 different easement landowners. More than 800 cubic yards of sediment was removed from these crossings and hauled to upland sights. Other work included minor stream bank and in-stream repair along with the removal of trees and debris that was deposited from the flood.

Target Species: Brown trout

Technique or Structure: Bank sloping (15), Material removal (20), stream crossing (11)

Tainter Creek (16) – Crawford County

Site Description: Melvin Olson upper farm, 1,700 feet upstream from machinery crossing

Project Length: 630 Feet

Fiscal Year: 2013 & 2014

Justification and Purpose: The purpose of this project is to stabilize the stream banks and create in-stream cover for trout. This is a continuing cooperative project with the Prairie Rod & Gun Club (PR&GC). The PR&GC applies for and receives Crawford County Conservation Aide funds to purchase rock for stream restoration projects.

Stream Habitat Impairments: Several stretches of the stream have unstable stream banks. The majority of the project area consists of stream stretches that are wide and shallow with only a few deep holes to provide cover for trout.

Target Species: Brown trout

Technique or Structure:

2013: Stream crossing (1), boulder retard (10), weir (5), rip rap (610 ft, 2), bank sloping (610 ft, 2), wing deflector (4), plunge pools (7), log/brush/rock shelters (8)

2014: Bank sloping (995 ft, 7), boulder clusters (20 ft, 2), boulder retard (8), weir (4), rip rap (995 ft, 72), wing deflector (5), plunge pools (7), log/brush/rock shelters (7)

Partners: Prairie Rod & Gun Club (materials – rip rap rock)

Site Description: Maintenance – Bruce Ristow Easement – two segments, one on each end of the easement

Project Length: 375 Feet

Fiscal Year: 2014

Justification and Purpose: Stabilize a 305 foot stretch of stream bank. The toe of the stream bank was stable but the upper portion of the bank needed to be stabilized to prevent flood water from washing through a narrow peninsula which would create a new stream channel. Also enlarge an overwintering hole by cleaning out rock rubble deposition.

Stream Habitat Impairments: Unstable stream bank and a large overwintering hole (plunge pool) had partially filled in with rock rubble from a major flood.

Target Species: Brown trout

Technique or Structure: Bank shaping and planting (305 ft), plunge pools (70 ft, 1), rip rap (305 ft), material removal (65ft)



Placing the first, large "face rock" onto a series of three LUNKERS structures.

Tarr Creek (17) – Monroe County

Site Description: 130 feet upstream from S F Street

Project Length: 160 Feet

Fiscal Year: 2014

Justification and Purpose: Restore and stabilize the stream banks and create in-stream cover for trout after a tank crossing was removed.

Stream Habitat Impairments: Unstable stream banks and lack of cover for trout.

Target Species: Brook and brown trout

Technique or Structure: LUNKERS (6), weir (3), bank shaping and planting (160 ft), plunge pools (3), log/brush/rock shelters (5), boulder retard (8), wing deflector (1)

Partners: Ft McCoy Fisheries Program (received grant, planned and designed project), US Fish and Wildlife Service (provided grant to Ft. McCoy)

Site Description: 470 feet downstream from S. 10th Ave

Project Length: 131 Feet

Fiscal Year: 2014

Justification and Purpose: Restore and stabilize the stream banks and create in-stream cover for trout after a tank crossing was removed.

Stream Habitat Impairments: Unstable stream banks and lack of cover for trout.

Target Species: Brook and brown trout

Technique or Structure: Rip rap (131 ft), weir (2), bank shaping and planting (131 ft), plunge pools (2), log/brush/rock shelters (6)

Timber Coulee Creek (18) – Vernon County

Site Description: Brye Easement - 460 feet upstream from State Property – Bob Jackson

Project Length: 25 Feet

Fiscal Year: 2014

Justification and Purpose: Clean out sediment deposition from a machinery crossing on an easement property.

Stream Habitat Impairments: Sediment was being added to the stream each time machinery would cross the stream.

Target Species: Brown trout

Technique or Structure: Material removal (25 ft), stream crossing (25 ft, 1)

Traverse Valley (19) – Trempealeau County

Site Description: Sobotta Easement

Project Length: 2,100 Feet

Fiscal Year: 2014

Justification and Purpose: stabilize 500' of eroding stream banks, remove box elder trees from stream cor-



Placing the last "face rock" onto the same series of three LUNKERS structures.

ridor, place rip-rap, burn brush piles. Complete a multi-year project started in 2010.

Stream Habitat Impairments: steep eroding stream banks.

Target Species: Brook and brown trout

Technique or Structure: Rip rap, bank stabilization

Partners: Trout Unlimited (materials – rip rap to stabilize banks), Elk Rod and Gun Club (materials, labor – rock, cutting brush/burning), Sobotta family (materials (seed, straw)

Trimble River (20) – Pierce County

Project Length: 600 Feet

Fiscal Year: 2014

Justification and Purpose: Previous to public ownership the project site was previously heavily pastured, primarily box elder woodland. The stream banks were

high, actively eroding with and box elder collapse accelerating bank instability. Large volume springs are common within the project reach providing potentially excellent thermal and water quality regimes for brook trout proliferation. Extremely poor cover habitat and spawning conditions extremely limited the possibility of wild brook trout establishment. Streambank stabilization and trout habitat techniques would vastly improve the stream conditions for trout survival.

Stream Habitat Impairments: The dam created an impoundment that raised water temperatures as well as blocked fish passage to upstream cold water sources.

Target Species: Brook and brown trout

Technique or Structure: Dam removal (100 ft, 1), bank shaping and planting (100 ft), bank sloping (100 ft)

Comments and Accomplishments: Dam has been removed, banks sloped and site stabilized.

West Fork Kickapoo River (21) – Vernon County

Site Description: 1,340 feet upstream from CTH P near E Bloomington Rd

Project Length: 665 Feet

Fiscal Year: 2014

Justification and Purpose: At the request of the easement landowner, three stream banks (130', 220' & 315') were stabilized that were starting to erode. Two within a cattle pasture and one eroding a fence that was on the end of an agricultural field. In addition to the bank stabilization, in-stream cover for trout was created along with making minor repairs to a machinery crossing.

Stream Habitat Impairments: The project area contains unstable stream banks along with some stretches of the stream are lacking cover for trout.

Target Species: Brown trout

Technique or Structure: bank shaping and planting (665 ft, 3), rip rap (665 ft, 3), weir (2), log/brush/rock shelters (2), stream crossing (1)

Wilson Creek (22) – Dunn County

Project Length: 2,360 Feet

Fiscal Year: 2013

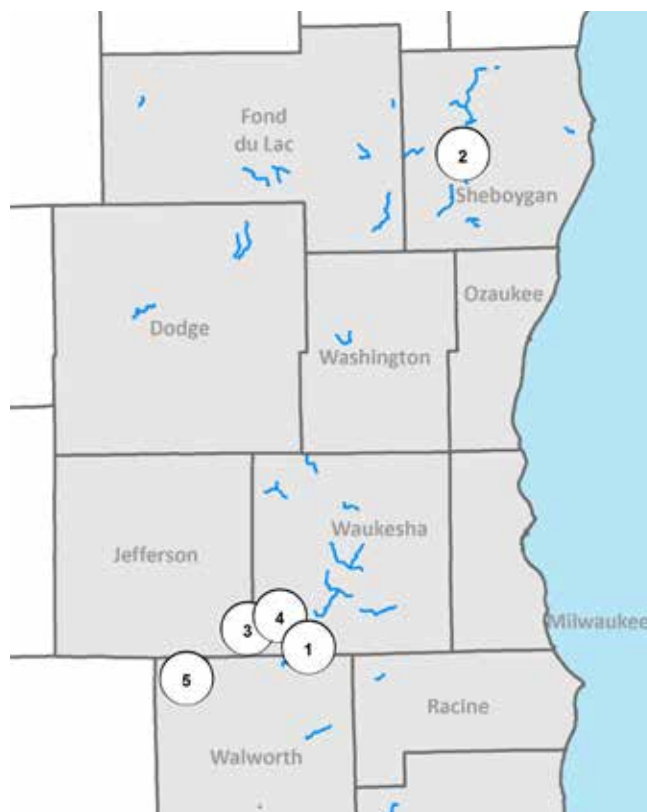
Justification and Purpose: Wilson Creek at this site was heavily wooded with box elder trees which precipitated streambank erosion and excessive channel width. This caused considerable sedimentation, steep eroding streambanks and overall very poor trout habitat due to lack of pools or overhead cover. The project plan was to remove these cloaking box elder trees, stabilize and narrow the stream

Stream Habitat Impairments: Excessive width causing sedimentation pool filling. Extreme sand bedload due to erosion from the high vertical streambanks.

Target Species: Brook trout

Technique or Structure: Bank shaping and planting (2,360 ft), boulder clusters (7), log, rootwad and boulder revetments (22), LUNKERS (224 ft, 28), rip rap (4,760 ft), brush removal (4,760 ft)

Partners: NRCS (riprap), Clear Water Trout Unlimited (materials, labor), WI Industrial Sands (labor), Dunn Fish & Game Association (materials, labor), Kiaptuwish TU (labor), Dunn County LCD (materials).



Eagle Field Unit

includes Lake Michigan South.

2013 Estimated Expenses: \$94,106

2014 Estimated Expenses: \$76,417

Mukwonago River (1) – Waukesha County

Fiscal Year: 2014

Justification and Purpose: To restore the Mukwonago River to the original stream bed prior to construction of the golf course. This phase of the project included restoring the original stream banks, stabilizing banks, and the addition of woody structure and biologs.

Stream Habitat Impairments: Seven culverts were removed as a part of this project. Culverts created barriers to fish passage, highly erosional banks and altered hydrological regime.

Target Species: Brook trout

Technique or Structure: Brush bundle/mattresses (400 ft., 2)

Comments and Accomplishments: This project continues to show progress as habitat improves, indicated by increased velocity, width:depth ratios, increased woody habitat, and increased exposed sand and gravel.

Onion River (2) – Sheboygan County

Site Description: Onion River

Project Length: 250 Feet

Fiscal Year: 2013

Justification and Purpose: This project aimed to sta-



Mukwanago River

bilize eroding and failing banks with integrated bank treatments. This project also enhanced instream habitat with cross channel logs, plunge pools and boulder placement.

Stream Habitat Impairments: Bank erosion/failure.

Target Species: Brown trout

Technique or Structure: LUNKERs.

Partners: Lakeshore Trout Unlimited, labor and materials (stone, rebar, seed, mulch, land access rights).

Paradise Springs Creek (3) – Waukesha County

Site Description: Downstream Hwy N

Project Length: 1,250 Feet

Fiscal Year: 2013

Justification and Purpose: Routine maintenance of LUNKER structures.

Stream Habitat Impairments: Formally ditched portion of stream now re-meandered using LUNKER structures and rock.

Target Species: Brook trout

Technique or Structure: Maintenance on 120 LUNKERs.

Comments and Accomplishments: Maintenance was completed and the banks were stabilized.

Scuppernong River (4) – Waukesha County

Site Description: East of Highway N

Project Length: 8,675 Feet

Fiscal Year: 2013

Justification and Purpose: Restore native streambed and re-align ditched portions of stream to historical meanders. Install overhead cover, course woody structure

and bank stability. Improve sinuosity and width:depth ratios.

Stream Habitat Impairments: Heavily ditched areas are wide, shallow and have low velocity contributing to thermal pollution and lack of cover.

Target Species: Brook trout

Technique or Structure: Channel shaping (4,600 ft)

Comments and Accomplishments: Stream is realigned with cover added. The project will be continued.

Site Description: Headwaters located at the intersection of Hwy 67 and Hwy ZZ

Project Length: 1,193 Feet

Fiscal Year: 2013

Justification and Purpose: Re-establish bed and bank post dam removal. The stream is currently wide, braided and shallow as a result of numerous small dams in this historical hotel and trout farm development.

Stream Habitat Impairments: Wide, shallow and braided with no defined bed and bank. Slow velocities and lack of overhead cover.

Target Species: Brook trout

Technique or Structure: Coconut fiber roll (1,000 ft, 56), bank sloping (100 ft)

Comments and Accomplishments: This reach is 50% complete.



Onion River

Whitewater Creek (5) – Walworth County

Site Description:

Project Length:

Fiscal Year: 2014

Justification and Purpose: Restore a portion of White-water Creek that was historically dredged and straightened for agricultural purposes. The project includes

narrowing the stream through a combination of brush bundles, brush matting, tree drops and biologs. These installations will improve the velocity of the stream and add coarse woody structure for fish, birds, macroinvertebrates and herptiles.

Stream Habitat Impairments: The stream is currently artificially widened and shallow, with a primarily silt bottom. Other nearby areas with past habitat improvements feature gravel, cobble, or other hardpan substrate due to increased velocity. The stream within the project reach also features little to no complexity or overhanging cover and is not likely to hold trout for any length of time.

Target Species: Brown trout

Technique or Structure: Planning

Comments and Accomplishments: FY2014 activities included project planning, permitting, supplies acquisition and minimal field work (site inspection and preparation, etc.).



East Operations – Wild Rose

2013 Estimated Expenses: \$189,771

2014 Estimated Expenses: \$162,976

Chaffee Creek (1) - Marquette

Site Description: Fee land adjacent/downstream of Hwy 39/51

Project Length: 3,900 Feet

Fiscal Year: 2013

Justification and Purpose: Mechanically remove overgrown woody vegetation within stream corridor.

Stream Habitat Impairments: Woody vegetation along stream banks inhibited fishability and navigability.

Target Species: Rainbow trout

Technique or Structure: brushing

Site Description: Hwy Y to Hwy Z – Fee Land

Project Length: 4,400 Feet

Fiscal Year: 2013

Justification and Purpose: Mechanically remove overgrown woody vegetation within stream corridor.

Stream Habitat Impairments: Woody vegetation along stream banks inhibited fishability and navigability.

Target Species: Brown trout

Technique or Structure: brushing

Site Description: Upstream of bridge

Project Length:

Fiscal Year: 2014

Justification and Purpose: Increase cover habitat. Increase sinuosity and velocity. Increase potential spawning habitat. Stabilize eroding streambanks. Increase angler access. Improve angling opportunity.

Stream Habitat Impairments: Stream surveys of recent years have indicated a decrease in adult and juvenile trout in this important cold water tributary to the Mecan River. Sand dominated streambanks are eroding and filling in pools and runs. Erosion has resulted in stream widening. Buckthorn and other woody vegetation have overgrown making access and fishing difficult.

Target Species: Brook and brown trout

Technique or Structure: Overhead bank cover (180 ft, 3), bank shaping and planting (180 ft), brush removal (500 ft), plunge pool (1)

Partners: Central Wisconsin Chapter Trout Unlimited, Fox Valley Chapter Trout Unlimited, and Elliott Donnelly Chapter Trout Unlimited (labor – multiple weekend workdays, assisted in construction of 3 overhead bank covers)

Mecan River (2) - Waushara

Site Description: North of Hwy 21, access off of 9th Ave

Project Length: 2,500 Feet

Fiscal Year: 2013

Justification and Purpose: Increase trout habitat quantity and improve trout habitat quality.

Stream Habitat Impairments: Previous trout habitat improvement project structure had completely failed,

leaving little to know overhead cover. Stone backfill from failed structures were removed and recycled as backfill for newly constructed overhead cover structures.

Target Species: Brown trout

Technique or Structure: Overhead bank cover (240 ft, 4), wing deflector (4), bank sloping (320 ft, 4), boulder clusters (7), log/brush/rock shelters (3)

Partners: Fox Valley Trout Unlimited Chapter (labor, monthly workdays, brushing and brush bundling), Central Wisconsin Trout Unlimited (labor, monthly workdays, brushing and brush bundling), Trout and Salmon Foundation (matching grant from Trout Unlimited donations), Elliott Donnelley Chapter of Trout Unlimited and Central Wisconsin Chapter of Trout Unlimited (gifted donation).

Mecan River (2) - Waushara

Site Description: North of Hwy 21

Project Length: 2,500 Feet

Fiscal Year: 2014

Justification and Purpose: Increase overhead cover, recycle failed bank covers (1966), increase sinuosity and velocity, increase potential spawning habitat, sediment catchment structure, improve angler access, and improve angling opportunity.

Stream Habitat Impairments: Failed bankcovers (1966) provide little to no cover habitat. Sediment collection in pools and runs. Little substrate variety (sand). Difficult to access and to fish.

Target Species: Brown trout

Technique or Structure: Overhead bank cover (360 ft, 6), bank shaping and planting (360 ft, 6), brush removal (5,000 ft), wing deflector (6), log/brush/rock shelters

Partners: Fox Valley Trout Unlimited Chapter, Fox Valley Chapter Trout Unlimited and Elliott Donnelley Chapter Trout Unlimited -Illinois (labor, multiple weekend workdays, assisted with construction of overhead bank covers), Trout and Salmon Foundation, Central Wisconsin Chapter Trout Unlimited, Elliott Donnelley Chapter Trout Unlimited (labor – leftover portion of donation to Wild Rose Operation stations completed in 2012 – for LTE)

Site Description: Upstream of Hwy 21, access off of 9th Ave

Project Length: 4,500 Feet

Fiscal Year: 2013

Justification and Purpose: Maintain and enhance previous trout habitat improvement projects. Brush stream-side overgrown woody vegetation to increase fishability. Increase trout habitat quantity and improve trout habitat quality.

Stream Habitat Impairments: Previous trout habitat improvement projects installed overhead bankcovers in the 1960's. These overhead covers have failed and provide little to no trout habitat.

Target Species: Brown trout

Technique or Structure: Brushing entire length of project.

Partners: Fox Valley Trout Unlimited Chapter (labor, monthly workdays, brushing and brush bundling),

Central Wisconsin Trout Unlimited (labor, monthly workdays, brushing and brush bundling), Trout and Salmon Foundation (matching grant from Trout Unlimited donations), Elliott Donnelley Chapter of Trout Unlimited and Central Wisconsin Chapter of Trout Unlimited (gifted donation).

Middle Branch Embarrass River (3) - Shawano

Site Description: Hwy Z – Fee Land

Project Length: 1,000 Feet

Fiscal Year: 2013

Justification and Purpose: Remove over grown woody vegetation within stream corridor.

Target Species: Brook trout

Stream Habitat Impairments: Woody vegetation along stream banks inhibited fishability and navigability..

Technique or Structure: brushing

Partners: Friends of Trout Unlimited, Antigo Trout Unlimited, Central Wisconsin Trout Unlimited, Shaw-Paca Trout Unlimited, Fox Valley Trout Unlimited, Green Bay Trout Unlimited (funding)

Murray Creek (4) - Waupaca

Site Description: Suhs Rd – Fee Land

Project Length: 3,000 Feet

Fiscal Year: 2013

Justification and Purpose: Mechanically remove overgrown woody vegetation within stream corridor.

Target Species: Brook and brown trout

Stream Habitat Impairments: Woody vegetation along stream banks inhibited fishability and navigability..

Technique or Structure: brushing

Partners: Friends of Trout Unlimited, Antigo Trout Unlimited, Central Wisconsin Trout Unlimited, Shaw-Paca Trout Unlimited, Fox Valley Trout Unlimited, Green Bay Trout Unlimited (funding)

Parson Creek (5) - Fond du Lac

Site Description: Hobb's Woods – Fond du Lac County Park

Project Length: 1,700 Feet

Fiscal Year: 2013

Justification and Purpose: Provide cover habitat for local Brook Trout population. Channelization of stream to increase stream velocity. Provide a productive trout angling experience in Fond Du Lac County.

Stream Habitat Impairments: Parsons Creek is one of three designated trout streams in Fond Du Lac County. Hobb's Woods Park is directly adjacent/upstream to a section of Parsons Creek where NRCS grants had funded a trout habitat improvement project. WDNR stocks this section with Brook Trout fingerlings annually. Park managers of Hobb's Woods have historically maintained walking trails and riverbanks thru the addition of gravel screenings. The additions of material had caused issues such as stream flow alterations, sedimentation, erosion, and loss of trout habitat.

Target Species: Brook trout

Technique or Structure: Overhead bank cover (120 ft, 2), tree cover (3), plunge pools (2), channel shaping (1,700 ft)



Pre, during and post habitat improvements in Parson Creek, Hobb's Woods, Fond du Lac County.

Partners: Fond Du Lac County Park Manager (Coordination to minimize park closure, park disturbance, structure location, trail work), Central Wisconsin Trout Unlimited Chapter (labor, overhead bankcovers), Southeast Trout Unlimited Chapter (labor, overhead bank covers), Wild Ones (labor, removed native flora), Oakfield Conservation Club (hosted public meeting), Boy Scouts (labor, planning to construct accessible fishing pier),

Site Description: Hobb's Woods – Fond Du Lac County Park – upstream of parking area

Project Length: 1,700 Feet

Fiscal Year: 2014

Justification and Purpose: Increase cover habitat. Increase sinuosity and velocity. Improve angling opportunity through the Fond du Lac county Park.

Stream Habitat Impairments: Years of park management practices have resulted in the degradation of the Brook trout fishery. Extraordinary flood events eroded naturally steep banks and widened stream.

Target Species: Brook trout

Technique or Structure: Overhead bank cover (120 ft, 2), tree cover (3), plunge pools (2), channel shaping (1,700 ft)

Partners: Central Wisconsin Trout Unlimited Chapter, Fox Valley Chapter Trout Unlimited, Elliot Donnelly Chapter Trout Unlimited (labor, construction of 2 overhead bankcovers), Wild Ones – Fox Valley Chapter (assisted in relocation of native vegetation from active worksite to other areas in park), Boy Scouts (labor, planning to construct accessible fishing pier),

Peterson Creek (6) - Waupaca

Site Description: Jensen Rd

Project Length: 1,000 Feet

Fiscal Year: 2013

Justification and Purpose: Increase trout habitat quantity and improve trout habitat quality. Provide overhead cover. Improve fishability.

Stream Habitat Impairments: This section of stream lacked overhead cover.

Target Species: Brook and brown trout

Technique or Structure: LUNKERS (70 ft, 1), brush bundle/mattresses (90 ft, 2), Overhead bank cover (70 ft, 1).

Partners: Fox Valley Trout Unlimited Chapter (labor, monthly Saturday workdays, LUNKER construction), Boy Scouts (labor, brushing and brush bundling), Friends of Trout Unlimited, Antigo Trout Unlimited, Central Wisconsin Trout Unlimited, Shaw-Paca Trout Unlimited, Fox Valley Trout Unlimited and Green Bay Trout Unlimited (gift donation).

Site Description: Jensen Rd- upstream of bridge

Project Length:

Fiscal Year: 2014

Justification and Purpose: Increase cover habitat. Increase spawning habitat. Improve angling opportunity.

Stream Habitat Impairments: Lack of overhead cover. Gravel runs have been covered by fine sediments. Overgrown willows and other woody vegetation have made fishing difficult.

Target Species: Brown trout

Technique or Structure: Site prep for completion in FY15

Pine River (7) - Waushara

Site Description: Aniwa Rd – downstream of parking area

Fiscal Year: 2014

Justification and Purpose: Increase cover habitat. Increase spawning habitat. Improve angler access. Improve angling opportunity.

Stream Habitat Impairments: Sand has collected in pools and runs. Spawning substrates are covered in sand. Angler access is limited.

Target Species: Brook and brown trout

Technique or Structure: Brush removal (1,900 ft), brush bundle/mattresses (30)

Partners: Wisconsin Trout Unlimited, Central Wisconsin Chapter Trout Unlimited, Shaw-Paca Chapter Trout Unlimited, Fox Valley Chapter Trout Unlimited, Green Bay Chapter Trout Unlimited, Antigo Chapter Trout Unlimited (provided donations funded summer LTE brushing crew)

Radley Creek (8) - Waupaca

Site Description: Between Dayton Rd parking area upstream to Hwy 22 parking area

Project Length: 2,400 Feet

Fiscal Year: 2014

Justification and Purpose: Improve angler access. Improve angling opportunity

Stream Habitat Impairments: Buckthorn and other woody vegetation has become overgrown making fishing next to impossible.

Target Species: Brook and brown trout

Technique or Structure: Brush removal, brush bundle/mattresses (20)

Partners: Rawhide Boys Ranch – About Face Program (labor – multiple work days, brushing), Wisconsin Trout Unlimited, Central Wisconsin Chapter Trout Unlimited, Shaw-Paca Chapter Trout Unlimited, Fox Valley Chapter Trout Unlimited, Green Bay Chapter Trout Unlimited, Antigo Chapter Trout Unlimited (labor – helped fund LTE brushing crew throughout the region)

Spaulding Creek (9) - Waupaca

Site Description: Upstream of parking area on Spaulding Rd

Project Length: 500 Feet

Fiscal Year: 2014

Justification and Purpose: Increase cover habitat. Increase potential spawning habitat. Improve angling opportunity.

Stream Habitat Impairments: Sand has collected in pools and runs. Spawning substrates are covered in sand. Angler access is limited.

Target Species: Brook trout

Technique or Structure: brush removal

Partners: Rawhide Boys Ranch – About Face Program (labor - brushing)

Schmudlack Creek (10) - Waushara

Site Description: Upstream of 9th Ave simple fee access

Project Length: 1,500 Feet

Fiscal Year: 2014

Justification and Purpose: Reconnect this important cold water tributary to the main channel of the thermally challenged Mecan River. Stream surveys of the Mecan River have recently shown a sharp decline in Brook trout numbers.

Stream Habitat Impairments: Extreme amount of cattle manure combined with prolific nature of Reed Canary Grass formed an impassable vegetative migration barrier.

Target Species: Brook trout

Technique or Structure: Material removal, channel shaping, bank shaping and planting

Soules Creek (11) - Waushara

Site Description: Swamp Rd parking area – Fee Land

Project Length: 3,000 Feet

Fiscal Year: 2013

Justification and Purpose: Mechanically remove overgrown woody vegetation within stream corridor.

Target Species: Brook and brown trout

Stream Habitat Impairments: Woody vegetation along stream banks inhibited fishability and navigability.

Technique or Structure: brushing

South Branch Embarrass River (12) - Shawano

Site Description: Trout Unlimited Easement – Verkuilen Property

Project Length: 2,500 Feet

Fiscal Year: 2013

Justification and Purpose: Mechanically remove overgrown woody vegetation within stream corridor.

Target Species: Brook and brown trout

Stream Habitat Impairments: Woody vegetation along stream banks inhibited fishability and navigability.

Technique or Structure: brushing

Partners: Friends of Trout Unlimited, Antigo Trout Unlimited, Central Wisconsin Trout Unlimited, Shaw-Paca Trout Unlimited, Fox Valley Trout Unlimited, Green Bay Trout Unlimited (funding)

Trout Nace Creek (13) - Waupaca

Site Description: Wilhelm Easement

Project Length: 600 Feet

Fiscal Year: 2013

Justification and Purpose: Repair installed cattle crossing

Target Species: Brook and brown trout

Stream Habitat Impairments: Protect trout habitat from cattle

Technique or Structure: Stream crossing

Upper Pine River – Wild Rose Pond (14) - Waushara

Site Description: Wild Rose Pond – Abandoned hatchery raceways adjacent to city boardway

Project Length: 500 Feet

Fiscal Year: 2013

Justification and Purpose: Remove over grown woody vegetation within stream corridor.

Stream Habitat Impairments: Woody vegetation along stream banks inhibited fishability and navigability.

Target Species: Brook and brown trout

Technique or Structure: brushing

Partners: Central Wisconsin Trout Unlimited Chapter (labor – monthly workday).

Waupaca River (15) - Waupaca

Site Description: Upstream of Hwy Q

Fiscal Year: 2014

Justification and Purpose: Increase overhead cover, increase sinuosity and velocity, increase potential spawning site habitat, create sediment catchment, improve angler access, and improve angler opportunity.

Stream Habitat Impairments: Habitat project (2000) bankcovers have failed providing little to no overhead cover. Sediment has collected in pools and runs. Angler access and opportunity has degraded due to buckthorn growth.

Target Species: Brown trout

Technique or Structure: Planning

Comments and Accomplishments: Project planning for FY15/FY16 instream work

West Branch White River (16) - Waushara

Site Description: Upstream of Cottonville Ave

Project Length: 4,000 Feet

Fiscal Year: 2013

Justification and Purpose: Sand trap - removal of collected sand from sediment catchment structure

Stream Habitat Impairments: Intensive development project was completed in 2011 thru this stretch of river. A major component in the design of the project was to transport fine sediments off of potential rainbow trout spawning habitat. Sediment catchment structure had collected 75 cubic yards of sand since the last time emptied (2011).

Target Species: Rainbow trout

Technique or Structure: Material removal (75 ft)

Site Description: Hwy T – Fee Land

Project Length: 2,000 Feet

Fiscal Year: 2013

Justification and Purpose: Remove storm damage trees from stream and reposition to provide trout habitat (LWD).

Stream Habitat Impairments: storm damaged tree inhibited stream flow, fishability, and navigability.

Target Species: Brown trout

Technique or Structure: Tree cover (2000 ft)

Fiscal Year: 2014

Justification and Purpose: Remove sand from sediment catchment.

Stream Habitat Impairments: Habitat improvement project (2010) continues to transport sand downstream.

Target Species: Rainbow trout

Technique or Structure: Material removal

White River (17) - Waushara

Site Description: 17th Ave, Upstream of Cottonville Ave, access from 17th Ave

Project Length: 2,500 Feet

Fiscal Year: 2013

Justification and Purpose: Stop braiding of main channel. Increase velocity of water in main channel. Increase trout habitat quantity and improve trout habitat quality.

Stream Habitat Impairments: This red canary grass dominated floodplain is fragmenting due to the relatively shallow root masses. Island formation has been the result of this fragmentation. Pool and run habitat have filled in with fine sediments (mainly sand). Stream width has increased.

Target Species: Brown trout

Technique or Structure: Channel Shaping

Partners: Rawhide Boys Ranch – About Face Program (labor, cut, bundled and delivered 700 Christmas trees), Fox Valley Trout Unlimited Chapter, Central Wisconsin Trout Unlimited, and Elliott Donnelly Trout Unlimited (labor, placement of Christmas Trees), Elliot Donnelly TU, Central Wisconsin TU and Trout and Salmon Foundation (donations to cover the majority of the Piranha Mini Dredge)

Site Description: Upstream and downstream of Cottonville Ave bridge (Deuel's Bridge)

Project Length: 2,800 Feet

Fiscal Year: 2014

Justification and Purpose: Stop braiding of main channel. Increase velocity of water in main channel. Increase habitat quantity and improve quality.

Stream Habitat Impairments: This reed canary grass dominated floodplain is fragmenting due to the relatively shallow root mass of RCG. Island formation has been the result of this fragmentation. Pool and run habitats have filled in with fine sediments (mainly sand). Stream width has increased.

Target Species: Brown trout

Technique or Structure: brush removal, brush bundle/mattresses (4), wing deflector (7), material removal

Partners: Waupaca County (materials – collected 125 Christmas trees from Recycling Center), Waushara County (materials – collected 100 Christmas trees from recycling center), Rawhide Boys Branch – About Face Program (labor - multiple work days, collected Christmas trees), Trout and Salmon Foundation and Elliot Donnelly Chapter Trout Unlimited (Donated funds to purchase Piranha Mini Dredge), Central Wisconsin Chapter Trout Unlimited, Fox Valley Chapter Trout Unlimited, and Elliot Donnelly Chapter Trout Unlimited, Rawhide Boys Ranch – About Face Program (labor – multiple work days, placing Christmas trees as braid stops and wing deflectors, assisted dredging sand to backfill structures), Wisconsin Trout Unlimited, Central Wisconsin Chapter Trout Unlimited, Shaw-Paca Chapter Trout Unlimited, Fox Valley Chapter Trout Unlimited, Green Bay Chapter Trout Unlimited, Antigo Chapter Trout Unlimited (A portion of generous donations totaling \$15,000 to the Wild Rose Fisheries Opera-

tions Station from Northeastern Wisconsin Chapters of Trout Unlimited helped to fund the summer LTE brushing crew on projects throughout the region)

Wilson Creek (18) - Shawano

Site Description: Witt-Birn Townline Rd, downstream of road crossing, County property

Project Length: 1,700 Feet

Fiscal Year: 2013

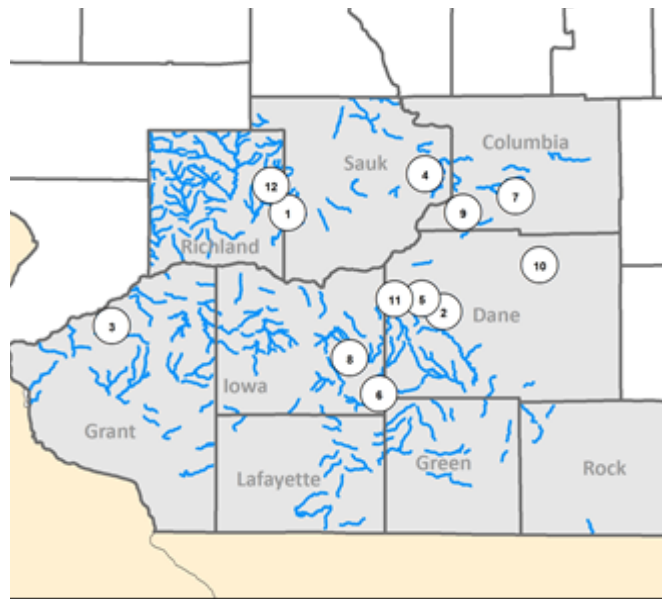
Justification and Purpose: Remove polyethylene sand bags from streambanks. The stream corridor was brushed to promote bank stabilizing vegetative growth.

Stream Habitat Impairments: Previous trout habitat improvement projects (1990) had failed. Polyethylene sands (1200+) were used to stabilize streambanks along stretch of river. Over time the stream has shifted within its floodplain and had exposed many of these sand bags. Little trout habitat, if any, was present.

Target Species: Brook trout

Technique or Structure: Material removal, tree cover (1,700 ft)

Partners: Rawhide Boys Ranch – About Face Program and Fox Valley Trout Unlimited Chapter (labor, removed sand bags, brush bundles and installed large woody debris), Shawano County (project coordination), Friends of Trout Unlimited, Antigo Trout Unlimited, Central Wisconsin Trout Unlimited, Shaw-Paca Trout Unlimited, Fox Valley Trout Unlimited, Green Bay Trout Unlimited (gift).



Fitchburg Field Unit

2013 Estimated Expenses: \$250,590

2014 Estimated Expenses: \$270,903

Bear Creek (1) - Sauk

Site Description: Sprecher Property

Project Length: 6,150 feet

Fiscal Year: 2013 & 2014

Justification and Purpose: The opening up of the riparian corridor along Bear Creek will allow for the infiltration of sunlight that will promote grass cover which will act as a better filter for surface sediment runoff, will discourage beaver activity, will provide better access for fishing and will promote greater fish productivity within the stream. The bank tapering will provide flood relief for the 3-5 year or greater flood events. The narrowing of the stream channel below the bank full height will allow the stream to scour out the fine sediments, exposing more rock substrate that is more conducive to fish spawning and macroinvertebrate production and will provide greater depth for fish cover. The placement of rock rip rap will stabilize the stream banks and prevent further erosion and channel movement. The installation of the in stream habitat will increase fish cover and fish size structure. This segment of Bear Creek is heavily fished and the habitat improvements will improve its accessibility and the quality of the trout fishery on this DNT public easement. This is a cooperative project involving the Aldo Leopold Chapter of Trout Unlimited, Sauk County Conservation Planning and Zoning (PLZ), Sauk County NRCS, the United States Fish and Wildlife Service, and numerous other partners.

DNR Trout Stamp money was spent on materials for LUNKER construction, and also on man hours and machine hours. Most of the funding for this massive project came from other sources, however. DNR trout



stamp funds were spent on this project in FY13, near the end of the fiscal year. Most of the project, including all of the in-stream work was completed in FY14.

Stream Habitat Impairments: Vertical eroded stream banks, sedimentation from runoff covering rocky substrate which is necessary for trout spawning and invertebrate production, lack of in-stream cover for trout, tree growth along stream corridor shading the stream bed and reducing primary productivity. There is progressive widening and loss of depth of stream due to bank erosion occurring. This widening reduces velocity and causes more rapid warming of the stream. This warming can lead to increased thermal stress on trout.

Target Species: Brown trout

Technique or Structure: LUNKERS (52), bank shaping and planting (12,234 ft), rip rap (5,836 ft), log, rootwad and boulder revetments, wing deflectors, weirs, brush removal, boulder retards, boulder clusters.

Partners: Aldo Leopold Chapter, Trout Unlimited (conduit between funding sources and National Trout Unlimited, labor and funding), United States Fish and Wildlife Service (materials), NRCS Baraboo (secured funding through grants and provided design for lower half of project), Sauk County Conservation Planning and Zoning (provided funding and expertise, designed upper half of project), Jason Sprecher (land owner).

Comments and Accomplishments: FY13 Trout Stamp dollars were spent at end of fiscal 13, this money was spent on pre-project work such as buying materials for LUNKERS, the actual stream work was completed in FY14 using non Trout Stamp funding supplied/procured by our partners.

Black Earth Creek (2) - Dane

Site Description: Within Black Earth Creek Fishery Area north of Stagecoach Rd.

Project Length: 2,000 feet

Fiscal Year: 2013

Justification and Purpose: This project element removed beaver dams and brushed willow succession.

Stream Habitat Impairments: Beaver damming prevented upstream migration and movement of spawning trout, as well as inundation of riffle features used in spawning.

Target Species: Brown trout

Technique or Structure: Beaver dam removal (10), brush removal (2,000 ft)

Partners: Trout Unlimited

Site Description: Within Village of Cross Plains through Zander Park

Project Length: 600 feet

Fiscal Year: 2013

Justification and Purpose: This project re-meandered the stream channel that was formerly the old millpond. The new stream channel added habitat diversity to a stream stretch that was uniform and somewhat featureless prior to the work. Access to the water was improved and opportunity enhanced. Storm water treatments were added where previously untreated storm flows had entered the stream.

Stream Habitat Impairments: The stream was characterized by a general lack of depth, dearth of overhead and in-stream cover, limited flow variation such as eddies and riffles and soft substrates.

Target Species: Brown trout

Technique or Structure: Channel shaping (600 ft), grade control measures (2), trees/rootwads (4), rip rap (300 ft)

Partners: Trout Unlimited (Materials – rock), Village of Cross Plains (Engineering assistance)

Comments and Accomplishments: Successfully completed, nice project with positive response by fish thus far

Big Green River (3) - Grant

Site Description: Austen Wayne – Fish Mgt. Easement Area

Project Length: 2,640 feet

Fiscal Year: 2013

Justification and Purpose: Stabilize the eroding stream-banks and improve the habitat for trout, other species of fish and other cold water stream related organisms inhabiting the riparian corridor along the stream. Historic work was repaired and new eroding banks were sloped and rip rapped.

Stream Habitat Impairments: Accelerated bank erosion

Target Species: Brown trout

Technique or Structure: Bank sloping (991 ft.), rip rap (991 ft.), wing deflector (6), weir (1), stream crossing (2)

Partners: NRCS (funding, design, and supervision)

Comments and Accomplishments: Completed

Site Description: Walter Workman – Fish Mgt. Easement Area

Fiscal Year: 2013

Justification and Purpose: Stabilize the eroding stream-banks and improve the habitat for trout, other species of fish and other cold water stream related organisms inhabiting the riparian corridor along the stream. Historic work was repaired and new eroding banks were sloped and rip rapped.

Stream Habitat Impairments: Accelerated bank erosion

Target Species: Brown trout

Technique or Structure: Bank sloping (800 ft.), rip rap (527 ft.), wing deflector (2)

Comments and Accomplishments: Completed

Site Description: Randal White – Fish Mgt. Easement Areas

Fiscal Year: 2013

Justification and Purpose: Stabilize the eroding stream-banks and improve the habitat for trout, other species of fish and other cold water stream related organisms inhabiting the riparian corridor along the stream. Historic work was repaired and new eroding banks were sloped and rip rapped.

Stream Habitat Impairments: Accelerated bank erosion

Target Species: Brown trout

Technique or Structure: Bank sloping (133 ft.), rip rap (133 ft.)

Comments and Accomplishments: Completed

Big Green River (3) - Grant

Site Description: Underwood - downstream of CTH K bridge

Project Length: 2,483 feet

Fiscal Year: 2014

Justification and Purpose: Wisconsin DNR holds a perpetual Fishing Easement on the Big Green River. The Big Green River, in the project area, is a large trout stream for this part of the state. It is one of the most well know and heavily fished trout streams in the state. The purpose of the project was to stabilize the severe, vertical, eroding stream banks, improve the in-stream habitat for trout and other cold water stream organisms and reduce turbidity and stream bed sedimentation in the project area and on downstream as well.

Stream Habitat Impairments: This stretch of stream has severe, vertical eroding stream banks that are causing habitat degradation as well as contributing to turbidity and siltation of the stream bed both within the project area as well as downstream. Also, there are two extremely long, wide flats filled with silt that not only do not contribute to high quality trout habitat but also degrade the water quality. One flat is 380 ft. in length with a width of 30 ft. to 40 ft. and the other is 275 ft. in length with a width of 22 ft. to 44 ft.

Target Species: Brown trout

Technique or Structure: Bank sloping (1170 ft.), erosion control hydro seed mulch, fencing (837 ft), rip rap (1,170 ft), stream crossing (1), wing deflectors "J" hooks (6), wing deflectors -stream barbs (5).

Partners: NRCS (design, funding, supervision)

Comments and Accomplishments: Completed - In addition to the above listed techniques and structure Types 6 backwater refuges were created by the 6 "J" Hooks. The "Erosion Matting" was actually "Ground Cover", a high velocity and winter resistant erosion control tackifier.

Clark Creek (4) - Sauk

Site Description: Devil's Lake State Park

Project Length: 600 feet

Fiscal Year: 2014

Justification and Purpose: Clark Creek has had major flooding and erosion issues impacting the native brook trout population that occurs there. Sauk county in cooperation with Devil's Lake State park are undertaking a 3 phase plan to 1) increase infiltration and reduce flood discharge by changing agricultural lands in the park to prairie/oak savannah 2) increase wetland storage in the basin by restoring wetlands connected to Clark Creek and 3) stabilize the eroding valley walls that the recent floods have incised and widened. This project is specifically the third element of this plan.

Stream Habitat Impairments: Clark Creek was actively downcutting and widening after the bed and banks became destabilized after the 2008 flooding events. Three sections of the stream had bank erosion that was also eroding the valley wall. There was a debris removal project by Sauk County that reduced the amount of overhead cover for fish.

Target Species: Brook trout

Technique or Structure: Tree revetments (596 ft, 3),

bank sloping (105 ft), channel shaping (596 ft), weir (4), stream crossing (1), weir (27)

Partners: Sauk County - Conservation Planning and Zoning Department (Sauk County paid for the survey work, the design and engineering, as well as the construction management services of Interfluve. They also paid for and coordinated the acquisition and delivery of the materials to the jobsite.), Interfluve (Interfluve was a contractor for Sauk county. They provided the stream survey, the engineering and treatment design, and they oversaw the instillation of the stream habitat project.)

Comments and Accomplishments: Project completed. Three of the wooden revetments have been installed. The channel has been realigned and moved away from the valley wall. Instream step pools and woody habitat has been installed. Extra materials were moved up and out of the flood plain. Topsoil was placed on top of the structures and all disturbed soil was seeded and mulched.

Garfoot Creek (5) - Dane

Site Description: SW ¼ of NE ¼ of Section 5 of T 7N R7E

Project Length: 950 feet

Fiscal Year: 2014

Justification and Purpose: to conduct stream habitat and bank stabilization work to improve the physical habitat and fishing opportunity of Garfoot creek.

Stream Habitat Impairments: the stream was characterized by a homogenous channel lacking depth, sinuosity, substrate diversity and an absence of coarse woody debris. Banks were eroding and unstable. Undesirable vegetation shaded banks and contributed to perpetuation of unwanted species such as buckthorn and honeysuckle.

Target Species: Brook and brown trout

Technique or Structure: Rip rap (600 ft), weir (3), wing deflector (6), log, rootwad and boulder revetments (3), bank shaping and planting (1,900 ft)

Kittleson Valley Creek (6) - Iowa

Project Length: 4,639 feet

Fiscal Year: 2013

Justification and Purpose: Increase the number of adult brown trout within public fishing areas. Improve stream quality.

Stream Habitat Impairments: High eroded banks, insufficient adult trout habitat

Target Species: Brown trout

Technique or Structure: Bank shaping and planting (2,578 ft), rip rap (1,123 ft), boulder retard (6), erosion control hydro seed mulch (2,578 ft), fencing (75 ft), plunge pools (5), stream crossing (2), wing deflector (3)

Comments and Accomplishments: Worked on 4639 feet if stream thread, approximately 2323 feet were completed.

Project Length: 5,357 feet

Fiscal Year: 2014

Justification and Purpose: Improve habitat for adult brown trout

Stream Habitat Impairments: Historic channelization for agriculture and abundance of sand on bed of stream.

Target Species: Brown trout

Technique or Structure: Bank shaping and planting (1,750 ft), tree cover (2), boulder retard (2), weir (2), plunge pools (5), trees/rootwads (2).

Comments and Accomplishments: Project was completed for fiscal year, but there is still approximately 1,176 feet of stream to finish.

Rowan Creek (7) - Columbia

Site Description: Rowan Creek Fishery Area at Loveland Rd. access.

Project Length: 600 feet

Fiscal Year: 2013 & 2014

Justification and Purpose: Remove trees and brush from stream corridor to promote light penetration to stream and promote grassy stream bank vegetation. Also preparation for intensive habitat project in near future. Brushing work was completed by a private contractor and paid for with Columbia County Conservation Aid grant. Minor oversight completed by WDNR using trout stamp funding.

Stream Habitat Impairments: Tree and brush growth in stream corridor shades the stream and stream bank, inhibiting primary productivity in the stream and destabilizing stream bank due to grassy vegetation being shaded out.

Target Species: Brown trout

Technique or Structure: Woody vegetation removal (600 ft)

Partners: Columbia County (County Conservation Aid Grant used on project materials and labor), LMS Construction Inc. (Performed work paid for with Conservation Aid grant money – labor and machine costs)

Comments and Accomplishments: Tree and brush removal were paid for with grant funding and this work was completed in March 2014.

Smith-Conley Creek (8) - Iowa

Fiscal Year: 2013

Justification and Purpose: Improve fish habitat structures for disabled fishing access along Smith-Conley Creek

Stream Habitat Impairments:

Target Species: Brown trout

Technique or Structure: LUNKERS (24 ft, 3), Weir (10 ft, 1), rip rap (67 ft)

Comments and Accomplishments: Project was completed in full.

Spring Creek (9) - Columbia

Site Description: Spring Creek Fishery Area, Lodi

Project Length: 2,000 feet

Fiscal Year: 2014

Justification and Purpose: Remove trees and brush from 2,000 feet of the right descending (RD) bank of Spring Creek on Spring Creek Fishery Area near Lodi, WI. Follow up woody vegetation removals with chemical treatment to suppress re-growth. Increase sunlight penetration to stream to increase primary productiv-

ity by removing large shade trees. Increased sunlight penetration along the bank encourages grassy/herbaceous plant growth which leads to increased stability of bank sediments and reduces sediment inputs into the stream. We also sought to improve accessibility/fishability for anglers by eliminating thick stands of woody vegetation.

Stream Habitat Impairments: Large willow and box elder trees along stream bank creating shade and reducing sunlight penetration to stream. These trees also fall into and across the stream making fishing difficult for anglers. Thick stands of dogwood along much of the



Bank stabilization and addition of woody habitat.



Finished bank with new seeding

bank make walking and fishing extremely difficult for anglers.

Target Species: Brown trout

Technique or Structure: Woody vegetation removal was completed in March 2014 (2000 ft of bank).

Comments and Accomplishments: Completed

Token Creek (10) - Dane

Project Length: 1,372 feet

Fiscal Year: 2014

Justification and Purpose: Restore stream channel of Token Creek in the in the former millpond.

Stream Habitat Impairments: Stream had been impounded for over 100 years. Lake sediment near the dam was up to ten feet thick.

Target Species: Brook and brown trout

Technique or Structure: bank shaping and planting (1,372 ft)

Comments and Accomplishments: Completed

Vermont Creek (11) - Dane

Site Description: From CTH JJ South (upstream) to property boundary with DNR fee ownership

Project Length: 1,300 feet

Fiscal Year: 2014

Justification and Purpose: diversify homogenous stream channel by adding habitat features and stabilizing banks. Remove nuisance woody vegetation from riparian corridor. Re-establish fence line to allow for better riparian corridor management by grazing, fire and mowing

Stream Habitat Impairments: channelization, sediment accumulation, loss of woody debris, bank failure.

Target Species: Brown trout

Technique or Structure: Bank shaping and planting (1,600 ft), erosion control hydro seed mulch (1,600 ft), fencing (2,370 ft), log, rootwad and boulder revetments (24), stone toe protection (840 ft), stream crossing (2), weir (3), wing deflector (12), log/brush/rock shelters (3)

Partners: Dane County LCD (materials)

Comments and Accomplishments: Completed

Willow Creek (12) - Richland

Fiscal Year: 2013

Justification and Purpose: Removal of beaver dams and willows on drainage ditches feeding Willow Creek on DNR fish management land.

Stream Habitat Impairments: Beavers were damming up the flow on the drainage ditches.

Target Species: Brown trout

Technique or Structure: Beaver removal, beaver dam removal

Partners: Private trappers (beaver removals)

Comments and Accomplishments: Completed



Hayward Field Unit

2013 Estimated Expenses: \$364

2014 Estimated Expenses: \$4,635

Border Brule River (WI/MI)

Project Length: 15,840 Feet

Fiscal Year: 2014

Justification and Purpose: In cooperation with the USFS and MIDNR, assess the impact of a 3-year, \$120,000 course woody debris project on the border Brule River (WI/MI) by surveying 10 index stations along the 5-mile corridor and documenting how well the course woody debris stayed where it was originally placed.

Stream Habitat Impairments: Improved a section of the Brule River that was wide, shallow, with temperatures that were near the upper end of trout survival and had limited cover. To a river stretch that is now narrower, faster moving water, improved water temperatures and has plenty of overhead cover. Trout numbers and size have improved.



Helicopter dropping wood cover into Brule River.

Target Species: Brook and brown trout

Technique or Structure:

Partners: Michigan DNR (equipment, labor), USFS (materials, equipment, labor)

Unnamed Tributary to Morgan Creek (1) - Ashland

Project Length: 1,000 Feet

Fiscal Year: 2014

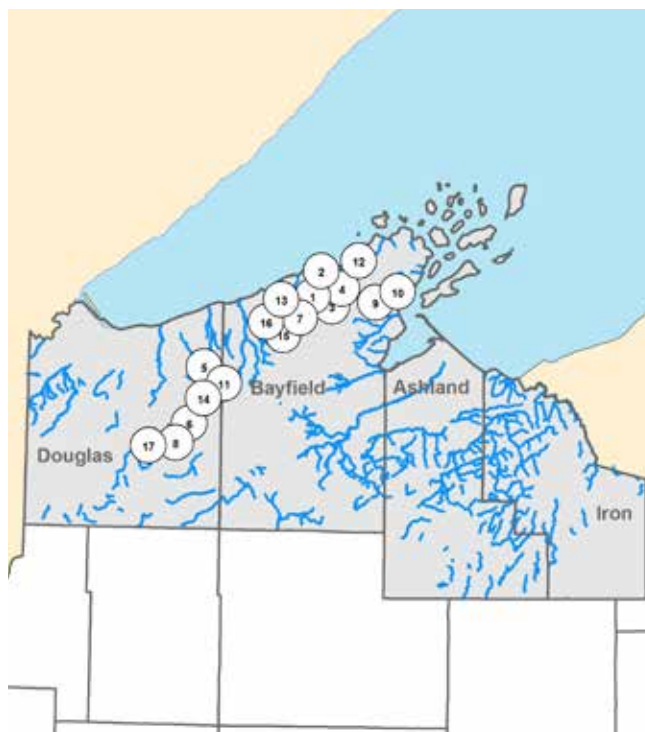
Justification and Purpose: Trout habitat consultation and assistance to the U.S. Forest Service (USFS) on trout streams located within the boundaries of the Chequamegon-Nicolet National Forest. Consulting, drafting, and submitting 3-5 County, State, and USACE permits directly related to trout stream habitat improvement and maintenance projects for the USFS. Brush and install habitat structures on South Branch of the Oconto River. Assist USFS trout habitat crew with scheduled trout habitat maintenance on Wisconsin Creek, Unnamed Trib to Morgan Creek and Venison Creek.

Stream Habitat Impairments: Broken structures, natural dams, tag alder choked and reduced flows.

Target Species: Brook and brown trout

Technique or Structure:

Partners: USFS (materials, labor)



Lake Superior Field Unit

2013 Estimated Expenses: \$23,744

2014 Estimated Expenses: \$127,433

Bark River Unnamed Tributary (East Fork Powerline) (1) - Bayfield

Fiscal Year: 2013

Justification and Purpose: This project continued previous work to expose spawning substrate and increase the production of naturally reproducing Lake Superior potadromous fish such as brown trout, steelhead, and coho salmon. The primary purpose was to reduce or eliminate streamside alder that could collapse into the channel and restrict sediment and wood transport. The primary goal was to reduce sediment deposition on spawning substrates.

Stream Habitat Impairments: Excessive wood debris, alder growth, and in-channel sediment deposition that could smother spawning substrates.

Target Species: Brown trout, rainbow (steelhead), coho salmon, brook trout

Technique or Structure: Material removal

Bark River Unnamed Tributary (1st Trib upstream from Lake Superior) (2) - Bayfield

Site Description: From confluence with east fork upstream to end of habitat management reach

Fiscal Year: 2013

Justification and Purpose: This project continued previous work to expose spawning substrate and increase the production of naturally reproducing Lake Superior

potadromous fish such as brown trout, steelhead, and coho salmon. The primary purpose was to reduce or eliminate streamside alder that could collapse into the channel and restrict sediment and wood transport. The primary goal was to reduce sediment deposition on spawning substrates.

Stream Habitat Impairments: Excessive wood debris, alder growth, and in-channel sediment deposition that could smother spawning substrates.

Target Species: Brown trout, rainbow (steelhead), coho salmon, brook trout

Technique or Structure: Material removal

Bark River Unnamed Tributary (Vietmeyer) (3) - Bayfield

Fiscal Year: 2013

Justification and Purpose: This project continued previous work to expose spawning substrate and increase the production of naturally reproducing Lake Superior potadromous fish such as brown trout, steelhead, and coho salmon. The project included two primary tasks: (1) reduce or eliminate instream wood material that caused sediment deposition and channel widening, and potentially impeded fish migration; and (2) reduce or eliminate streamside alder that could collapse into the channel and restrict sediment and wood transport. The primary goal was to reduce sediment deposition on spawning substrates.

Stream Habitat Impairments: Excessive wood debris, alder growth, and in-channel sediment deposition that could smother spawning substrates.

Target Species: Brown trout, steelhead, coho salmon

Technique or Structure: Material removal, channel shaping

Bark River Unnamed Tributary (West Fork Powerline) (4) - Bayfield

Fiscal Year: 2013

Justification and Purpose: This project continued previous work to expose spawning substrate and increase the production of naturally reproducing Lake Superior potadromous fish such as brown trout, steelhead, and coho salmon. The primary purpose was to reduce or eliminate streamside alder that could collapse into the channel and restrict sediment and wood transport. The primary goal was to reduce sediment deposition on spawning substrates.

Stream Habitat Impairments: Excessive wood debris, alder growth, and in-channel sediment deposition that could smother spawning substrates.

Target Species: Brown trout, rainbow (steelhead), coho salmon, brook trout

Technique or Structure: Material removal

Brule River Tributary (Sandy Run) (5) - Douglas

Site Description: From confluence with east fork upstream to end of habitat management reach

Fiscal Year: 2013

Justification and Purpose: This project continued previ-

ous work to expose spawning substrate and increase the production of naturally reproducing Lake Superior potadromous fish such as brown trout, steelhead, and coho salmon. The primary purpose was to reduce or eliminate streamside alder that could collapse into the channel and restrict sediment and wood transport. The primary goal was to reduce sediment deposition on spawning substrates.

Stream Habitat Impairments: Excessive wood debris, alder growth, and in-channel sediment deposition that could smother spawning substrates.

Target Species: Brown trout, rainbow (steelhead), coho salmon, brook trout

Technique or Structure: Material removal, channel shaping

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Brule River Tributary (Stone's Tributary) (6) - Douglas

Site Description: Marsh outlet downstream of CTH S downstream to confluence with unnamed tributary

Fiscal Year: 2013

Justification and Purpose: This project continued previous work to expose spawning substrate and increase the production of naturally reproducing Lake Superior potadromous fish such as brown trout, steelhead, and coho salmon. The project included two primary tasks: (1) reduce or eliminate large cobble and small boulder that caused sediment deposition and channel widening, and potentially impeded fish migration; and (2) reduce or eliminate streamside alder that could collapse into the channel and restrict sediment and wood transport. The primary goal was to reduce sediment deposition on spawning substrates.

Stream Habitat Impairments: Excessive large cobble and small boulder, alder growth, and in-channel sediment deposition that could smother spawning substrates.

Target Species: Brown trout, rainbow (steelhead), coho salmon, brook trout

Technique or Structure: Material removal, channel shaping

Brule River Tributary (Stone's Tributary) (6)

Fiscal Year: 2014

Justification and Purpose: This project continued previous work to expose spawning substrate and increase the production of naturally reproducing Lake Superior potadromous fish such as brown trout, steelhead, and coho salmon. The project included two primary tasks: (1) reduce or eliminate instream wood material that caused sediment deposition and channel widening, and potentially impeded fish migration; and (2) reduce or eliminate streamside alder that could collapse into the channel and restrict sediment and wood transport. The primary goal was to reduce sediment deposition on spawning substrates.

Stream Habitat Impairments: In-channel sediment deposition that could smother spawning substrates.

Target Species: Brown trout, rainbow (steelhead), coho salmon, brook trout

Technique or Structure: Material removal (1,466 ft)

Comments and Accomplishments: Inspected and maintained a previously established habitat management section.

East Flag River (7) - Bayfield

Site Description: Habitat management reach approximately 0.3 miles upstream from confluence with east unnamed tributary

Project Length:

Fiscal Year: 2013

Justification and Purpose: This project continued previous work to expose spawning substrate and increase the production of naturally reproducing Lake Superior potadromous fish such as brown trout, steelhead, and coho salmon. The project included two primary tasks: (1) reduce or eliminate instream wood material that caused sediment deposition and channel widening, and potentially impeded fish migration; and (2) reduce or eliminate streamside alder that could collapse into the channel and restrict sediment and wood transport. The primary goal was to reduce sediment deposition on spawning substrates.

Stream Habitat Impairments: Excessive wood debris, alder growth, and in-channel sediment deposition that could smother spawning substrates.

Target Species: Brown trout, rainbow (steelhead), coho salmon, brook trout

Technique or Structure: Material removal, channel shaping

Fiscal Year: 2014

Justification and Purpose: This project continued previous work to expose spawning substrate and increase the production of naturally reproducing Lake Superior potadromous fish such as brown trout, steelhead, and coho salmon. The project included two primary tasks: (1) reduce or eliminate instream wood material that caused sediment deposition and channel widening, and potentially impeded fish migration; and (2) reduce or eliminate streamside alder that could collapse into the channel and restrict sediment and wood transport. The primary goal was to reduce sediment deposition on spawning substrates.

Stream Habitat Impairments: In-channel sediment deposition that could smother spawning substrates.

Target Species: Brown trout, rainbow (steelhead), coho salmon, brook trout

Technique or Structure: Material removal (3,210 ft)

Comments and Accomplishments: Inspected and maintained a previously established habitat management section.

Jereseth Creek (8) - Douglas

Fiscal Year: 2014

Justification and Purpose: This project continued previous work to expose spawning substrate and increase the production of naturally reproducing Lake Superior potadromous fish such as brown trout, steelhead, and coho salmon. The project included two primary tasks: (1) reduce or eliminate instream wood material that

caused sediment deposition and channel widening, and potentially impeded fish migration; and (2) reduce or eliminate streamside alder that could collapse into the channel and restrict sediment and wood transport. The primary goal was to reduce sediment deposition on spawning substrates.

Stream Habitat Impairments: In-channel sediment deposition that could smother spawning substrates.

Target Species: Brown trout, rainbow (steelhead), coho salmon, brook trout

Technique or Structure: Material removal (3,776 ft)

Comments and Accomplishments: Inspected and maintained a previously established habitat management section.

Little Sioux River (9) - Bayfield

Site Description: downstream from Little Sioux Road

Fiscal Year: 2013

Justification and Purpose: This project continued previous work to expose spawning substrate and increase the production of naturally reproducing Lake Superior potadromous fish such as brown trout, steelhead, and coho salmon. The primary purpose was to reduce or eliminate instream wood material that caused sediment deposition and channel widening, and potentially impeded fish migration. The primary goal was to reduce sediment deposition on spawning substrates.

Stream Habitat Impairments: Excessive wood debris and in-channel sediment deposition that could smother spawning substrates.

Target Species: Brown trout, rainbow (steelhead), coho salmon, brook trout

Technique or Structure: Material removal, channel shaping

Partners: Wild Rivers Chapter Trout Unlimited (labor, removed speckled alder cutting from channel margins)

Comments and Accomplishments:

Pikes Creek (10) - Bayfield

Fiscal Year: 2014

Justification and Purpose: This project continued previous work to expose spawning substrate and increase the production of naturally reproducing Lake Superior potadromous fish such as brown trout, steelhead, and coho salmon. The project included two primary tasks: (1) reduce or eliminate instream wood material that caused sediment deposition and channel widening, and potentially impeded fish migration; and (2) reduce or eliminate streamside alder that could collapse into the channel and restrict sediment and wood transport. The primary goal was to reduce sediment deposition on spawning substrates.

Stream Habitat Impairments: In-channel sediment deposition that could smother spawning substrates.

Target Species: Brown trout, rainbow (steelhead), coho salmon, brook trout

Technique or Structure: Material removal (883 ft)

Partners:

Comments and Accomplishments: Inspected and maintained a previously established habitat management section

Rocky Run (11) - Douglas

Fiscal Year: 2014

Justification and Purpose: This project continued previous work to expose spawning substrate and increase the production of naturally reproducing Lake Superior potadromous fish such as brown trout, steelhead, and coho salmon. The project included two primary tasks: (1) reduce or eliminate instream wood material that caused sediment deposition and channel widening, and potentially impeded fish migration; and (2) reduce or eliminate streamside alder that could collapse into the channel and restrict sediment and wood transport. The primary goal was to reduce sediment deposition on spawning substrates.

Stream Habitat Impairments: In-channel sediment deposition that could smother spawning substrates.

Target Species: Brown trout, rainbow (steelhead), coho salmon, brook trout

Technique or Structure: Material removal (2,415 ft)

Comments and Accomplishments: Inspected and maintained a previously established habitat management section

Saxine Creek (12) - Bayfield

Site Description: Mainstem at confluence of two upstream-most tributaries

Fiscal Year: 2013

Justification and Purpose: This project continued previous work to expose spawning substrate and increase the production of naturally reproducing Lake Superior potadromous fish such as brown trout, steelhead, and coho salmon. The primary purpose was to reduce or eliminate streamside alder that could collapse into the channel and restrict sediment and wood transport. The primary goal was to reduce sediment deposition on spawning substrates.

Stream Habitat Impairments: Excessive alder growth with potential in-channel sediment deposition that could smother spawning substrates.

Target Species: Brown trout, rainbow (steelhead), coho salmon, brook trout

Technique or Structure: Material removal

Unnamed Tributary to East Fork Flag River (13) - Bayfield

Fiscal Year: 2014

Justification and Purpose: This project continued previous work to expose spawning substrate and increase the production of naturally reproducing Lake Superior potadromous fish such as brown trout, steelhead, and coho salmon. The project included two primary tasks: (1) reduce or eliminate instream wood material that caused sediment deposition and channel widening, and potentially impeded fish migration; and (2) reduce or eliminate streamside alder that could collapse into the channel and restrict sediment and wood transport. The primary goal was to reduce sediment deposition on spawning substrates.

Stream Habitat Impairments: In-channel sediment deposition that could smother spawning substrates.

Target Species: Brown trout, rainbow (steelhead), coho salmon, brook trout

Technique or Structure: Material removal (200 ft)

Comments and Accomplishments: Inspected and maintained a previously established habitat management section.

Unnamed Tributary to Brule River (Cutler Creek) (14) - Douglas

Fiscal Year: 2014

Justification and Purpose: This project continued previous work to expose spawning substrate and increase the production of naturally reproducing Lake Superior potadromous fish such as brown trout, steelhead, and coho salmon. The project included two primary tasks: (1) reduce or eliminate instream wood material that caused sediment deposition and channel widening, and potentially impeded fish migration; and (2) reduce or eliminate streamside alder that could collapse into the channel and restrict sediment and wood transport. The primary goal was to reduce sediment deposition on spawning substrates.

Stream Habitat Impairments: In-channel sediment deposition that could smother spawning substrates.

Target Species: Brown trout, rainbow (steelhead), coho salmon, brook trout

Technique or Structure: Material removal (672 ft)

Comments and Accomplishments: Inspected and maintained a previously established habitat management section.

Unnamed Tributary to Brule River (Cutler Creek) (14) - Douglas

Fiscal Year: 2014

Justification and Purpose: This project continued previous work to expose spawning substrate and increase the production of naturally reproducing Lake Superior potadromous fish such as brown trout, steelhead, and coho salmon. The project included two primary tasks: (1) reduce or eliminate instream wood material that caused sediment deposition and channel widening, and potentially impeded fish migration; and (2) reduce or eliminate streamside alder that could collapse into the channel and restrict sediment and wood transport. The primary goal was to reduce sediment deposition on spawning substrates.

Stream Habitat Impairments: In-channel sediment deposition that could smother spawning substrates.

Target Species: Brown trout, rainbow (steelhead), coho salmon, brook trout

Technique or Structure: Material removal (882 ft)

Comments and Accomplishments: Initiated habitat management in section not previously managed

Upper West Flag River (15) - Bayfield

Fiscal Year: 2013

Justification and Purpose: This project continued previous work to expose spawning substrate and increase the production of naturally reproducing Lake Super-

rior potadromous fish such as brown trout, steelhead, and coho salmon. The primary purpose was to reduce streamside alder that could collapse into the channel and restrict sediment and wood transport. The primary goal was to reduce sediment deposition on spawning substrates.

Stream Habitat Impairments: Excessive alder growth and in-channel sediment deposition that could smother spawning substrates.

Target Species: Brown trout, rainbow (steelhead), coho salmon, brook trout

Technique or Structure: Material removal

West Fork Flag River (16) - Bayfield

Fiscal Year: 2014

Justification and Purpose: This project continued previous work to expose spawning substrate and increase the production of naturally reproducing Lake Superior potadromous fish such as brown trout, steelhead, and coho salmon. The project included two primary tasks: (1) reduce or eliminate instream wood material that caused sediment deposition and channel widening, and potentially impeded fish migration; and (2) reduce or eliminate streamside alder that could collapse into the channel and restrict sediment and wood transport. The primary goal was to reduce sediment deposition on spawning substrates.

Stream Habitat Impairments: In-channel sediment deposition that could smother spawning substrates.

Target Species: Brown trout, rainbow (steelhead), coho salmon, brook trout

Technique or Structure: Material removal (2,334 ft)

Comments and Accomplishments: Inspected and maintained a previously established habitat management section.

Wilson Creek (17) - Douglas

Fiscal Year: 2014

Justification and Purpose: This project continued previous work to expose spawning substrate and increase the production of naturally reproducing Lake Superior potadromous fish such as brown trout, steelhead, and coho salmon. The project included two primary tasks: (1) reduce or eliminate instream wood material that caused sediment deposition and channel widening, and potentially impeded fish migration; and (2) reduce or eliminate streamside alder that could collapse into the channel and restrict sediment and wood transport. The primary goal was to reduce sediment deposition on spawning substrates.

Stream Habitat Impairments: In-channel sediment deposition that could smother spawning substrates.

Target Species: Brown trout, rainbow (steelhead), coho salmon, brook trout

Technique or Structure: Material removal (3,560 ft)

Comments and Accomplishments: Inspected and maintained a previously established habitat management section.



Oshkosh Field Unit

2013 Estimated Expenses: \$5,611

2014 Estimated Expenses: \$8,310

Radley Creek (1) - Waupaca

Site Description: on DNR property downstream of State HWY 22

Project Length: 400 Feet

Fiscal Year: 2014

Justification and Purpose: This was a project that is sponsored by DNR to improve trout habitat on Radley Creek. Primary goals are to improve spawning areas and cover for adult and juvenile trout. Work will be completed by Boy Scouts as part of an Eagle Scout Project. Work will entail placement of up to 7 brush bundles in approximately 400 feet of trout stream.

Stream Habitat Impairments: Stream sedimentation.

Target Species: Brook and brown trout

Technique or Structure: brush bundle/mattresses (400 ft, 7), tree cover (400 ft, 3)

Comments and Accomplishments: Worked with Boy Scout to design habitat project on Radley Creek for Eagle Scout Recognition.



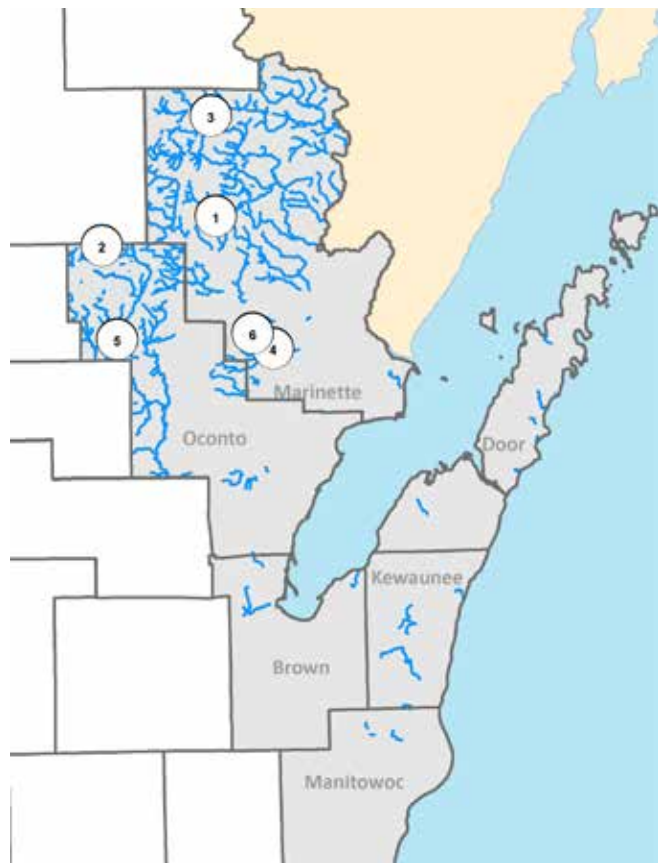
Boy Scouts working on Radley Creek.

Waupaca, Shawano, Waushara, Marquette Counties
Fiscal Year: 2014

Justification and Purpose: Address beaver problems as needed on DNR lands associated with trout streams in Waupaca, Shawano, Waushara and Marquette Counties
Stream Habitat Impairments: Thermal impacts from impounded water and barrier to trout migration.

Target Species: Brook and brown trout

Comments and Accomplishments: Beaver problems were minimal during this fiscal year and activity in this project was low.



Peshtigo Field Unit

2013 Estimated Expenses: \$135,457
2014 Estimated Expenses: \$104,633

Trout Streams in Oconto and Marinette counties

Site Description: All classified trout streams within the Little Peshtigo, Oconto and South Branch Oconto River HUC-12 Watersheds in Oconto and Marinette counties.
Fiscal Year: 2013

Justification and Purpose: A Geographic Information System query of road and trout stream crossings in these three watersheds revealed a total of 178 crossings. Counties, townships, the U.S. Forest Service, or other entities who maintain roads in these watersheds have limited funding to replace bridges and culverts. Therefore, identifying and prioritizing barriers to fish passage is crucial to get the biggest “bang for the buck” to benefit fish and aquatic organisms.

Stream Habitat Impairments: Several culverts on classified trout streams in these watersheds are known barriers to fish passage. These inadequate crossings were discovered during WDNR fisheries field activities at those locations in 2012. It is very likely that additional (complete or partial) barriers exist in these watersheds.

Target Species: Brook and brown trout

Technique or Structure: Data inventory

Partners: Matt Diebel, WDNR Science Services (technical assistance, training on protocol, cost/benefit model)





Perched outlet on McDonald Creek, a Class I trout stream.

Comments and Accomplishments: 9 out of 178 crossings were identified as being a complete or partial barrier to trout movement

Trout Streams in Marinette and Oconto counties

Site Description: Trout Streams in Marinette and Oconto Counties

Fiscal Year: 2013

Justification and Purpose: Conduct beaver control on selected trout streams and their tributaries in Marinette & Oconto Counties. Number of selected streams in Marinette County is 37 named streams and 28 unnamed streams with a total of 263.9 miles. Oconto County has 23 named streams and 26 unnamed streams with a total of 171.7 miles of trout stream. Project has a combined total of 60 named streams and 54 unnamed streams with a total of 435.6 miles of trout stream. Project complies with Department's Administrative Code NR 1.16 (4) (b) 1.

Stream Habitat Impairments: Beaver dams deteriorate trout stream & spring pond habitat, hinder fish passage and have a general warming effect to the water temperatures.

Target Species: Brook and brown trout

Technique or Structure: Beaver Dam Removal (3, 9)

Beaver Removal (19, 40)

Site Description: Trout Streams in Marinette and Oconto Counties

Fiscal Year: 2014

Justification and Purpose: Conduct beaver control on selected trout streams and their tributaries in Marinette, Oconto and southern fringe of Forest County. Marinette has 37 named streams and 28 unnamed streams with a total of 263.9 miles. Oconto County has 23 named streams and 26 unnamed streams with a total of 171.7 miles of trout stream. Project has a combined total of 60 named streams and 54 unnamed streams with a total of 435.6 miles of trout stream. Project complies with Department's Administration Code NR 1.16 (4) (b) 1.

Stream Habitat Impairments: Beaver dams deteriorate trout stream & spring pond habitat, hinder fish passage and have a general warming effect to the water temperatures.

Target Species: Brook and brown trout

Technique or Structure: Beaver Dam Removal (15, 6)

Beaver Removal (20, 14, 7)

Eagle Creek (1) - Marinette

Site Description: Marinette County

Fiscal Year: 2014

Justification and Purpose: Purpose of this project is to maintain a fifty (50) foot sand trap located on the downstream side of a habitat project which has 12 prefabricated bank covers. Annual dredging of this sand trap is required to clean out trap and maintain trap's ability to collect large granule sands. This sand trap reduces the amount of sand moving downstream and covering desirable habitat for the cold water resource.

Stream Habitat Impairments: Eagle Creek has an above average bedload of sand which naturally drifts downstream. A sand trap had been constructed at the end of a habitat project area and upstream from a riffle area of stream which contains gravel, rubble and boulders. This trap has reduced the amount of sand from drifting into this segment of stream.

Target Species: Brook trout

Technique or Structure: Material removal (50 ft)

Comments and Accomplishments: Removed 80 cu yds from Trap/Continuing Project

Hemlock Spring Pond (2) - Oconto

Fiscal Year: 2013

Justification and Purpose: Deepen present spring pond to improve living conditions for native brook trout. This spring pond is of 2.0 acres in size.

Stream Habitat Impairments: Current spring pond has filled with silt. Deepening pond will improve living conditions for brook trout and possibly recover suitable spawning substrate.

Target Species: Brook trout

Technique or Structure: Material removal

Partners: US Forest Service (labor, equipment, materials, built earth berm on main outfall area), Trout Unlimited (materials), Krueger & Stienfest, Inc (contracted source to prepare site for launching hydraulic dredge), Town of Townsend (gravel), Langlade County High-

way Department (contracted source to transfer hydraulic dredge).

Comments and Accomplishments: First Yr. of Dredging/.76 Acres, 8,570 Cu. Yds. Dredged

Fiscal Year: 2013

Justification and Purpose: Deepen present spring pond to improve living conditions for the indigenous brook trout fishery. With spring pond's close proximity to the North Branch Oconto River, which is a temperature challenged stream during months of July & August, this pond is expected to provide a cool water retreat from unfavorable water temperatures in the N. Br. Oconto during these months.

Stream Habitat Impairments: This spring pond has filled in with silt over time leaving very little living conditions for a trout fishery. With the exception of several deep pools caused by a strong upwelling of ground water, most of pond is less than two feet deep. Fallen timber, which normally provides habitat, is mostly embedded in silt.

Target Species: Brook trout

Technique or Structure: Material removal

Comments and Accomplishments: 2nd Year of Dredging/.93 Acres, 10,500 Cu. Yds. Dredged

K. C. Creek (3) - Marinette

Project Length: 5,300 Feet

Fiscal Year: 2013

Justification and Purpose: Restore existing habitat devices which were built in the mid 1970's by Marinette County's Youth Adult Conservation Crew (YACC). Provide access for heavy equipment to perform restoration activities.

Stream Habitat Impairments: Existing habitat devices have deteriorated over time. Restore habitat devices to a functional level and improve aesthetics of present structures. Provide access for heavy equipment in order to conduct restoration activities.

Target Species: Brook and brown trout

Technique or Structure: Access road preparation completed

Partners: Marinette County Forestry Department (materials - donated pit-run gravel for road base)

North Branch Beaver Creek (4) - Marinette

Site Description: Holley's Hole Sand Trap, Marinette County

Project Length: 150 Feet

Fiscal Year: 2013

Justification and Purpose: Capture bedload of sand that had built up on stream bottom from a perched culvert replacement. A bedload of sand had accumulated on stream bed above 21st Rd. Purpose of project is to capture most of the sand moving downstream

Stream Habitat Impairments: Prevent bedload of sand from flowing downstream and filling in pools and covering desirable substrate and trout habitat.

Target Species: Brook and brown trout

Technique or Structure: Material removal

Partners: Emory LaRue - adjacent landowner (Materi-

als - allowed DNR to deposit spoil from sand trap onto property. Spoil was leveled, seeded and then mulched)

Comments and Accomplishments: Removed 84 cu. yds from trap/Continuing Project

1st South Branch Oconto River (5) - Oconto

Project Length: 4,350 Feet

Fiscal Year: 2013

Justification and Purpose: Rip rap selected bank covers on existing Trout Stream Habitat Project.

Stream Habitat Impairments: Six (6) of the current 30 bank covers located in this project site of ~ 4350 feet in length needed additional rip rap due to settling of the rip rap that was originally placed behind these habitat devices over 30 years ago (1981). Since this date no additional rip rap was required.

Target Species: Brook and brown trout

Technique or Structure: Rip rap (6)

Partners: Green Bay and Oconto River Trout Unlimited Chapters (labor - applied rip rap, Trout Unlimited outings)

Comments and Accomplishments: Rip rap application was completed.

Walker Creek (6) - Marinette

Site Description: Marinette County

Project Length: 1,400 Feet

Fiscal Year: 2014

Justification and Purpose: Purpose of project is to reduce the amount of sand bedload in the Walker Creek. Reduction in sand sediment will benefit reproduction of trout, increase living conditions for favorable invertebrates and improve habitat conditions by allowing deepening of pools and exposing woody debris.

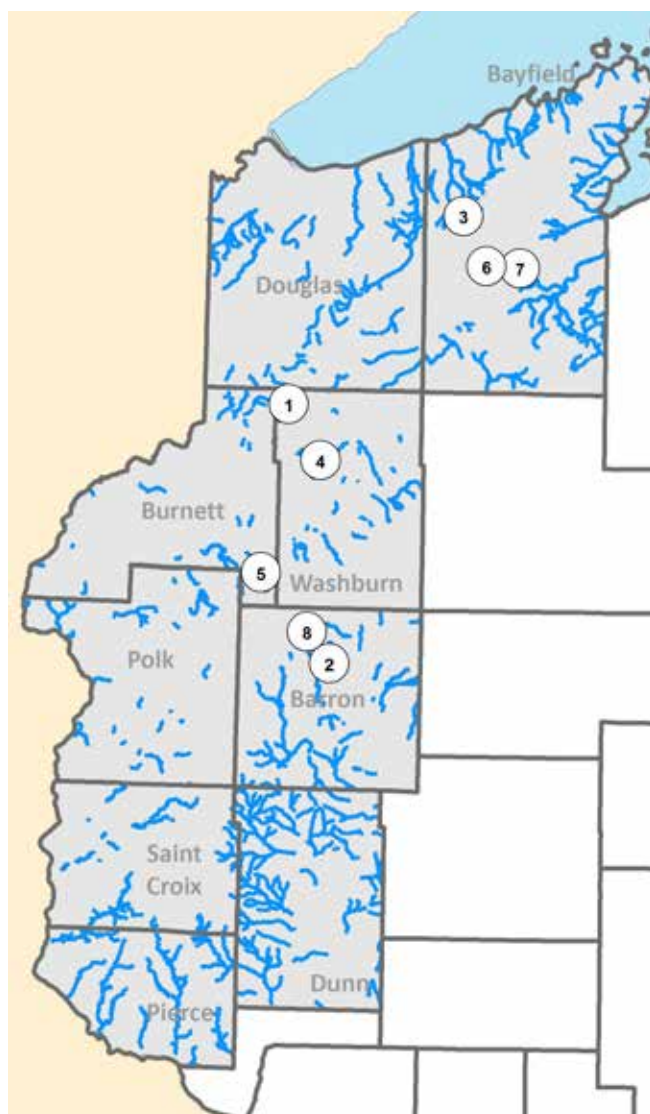
Stream Habitat Impairments: Sand sediment covers desirable substrate for trout to spawn. Movement of large sand granules fill in pools and cover desirable gravel substrate and woody debris.

Target Species: Brook and brown trout

Technique or Structure: Material removal

Partners: Comments and Accomplishments: Removed 14 cu yds from Trap/Continuing Project





Spooner Field Unit

2013 Estimated Expenses: \$94,053

2014 Estimated Expenses: \$65,303

Fivemile Creek (1) - Washburn

Project Length: 1,800 Feet

Fiscal Year: 2013

Justification and Purpose: This project covered the cost of brushing on Five Mile Creek for the purpose of increasing stream productivity and sediment transport, as well as improving angler access.

Stream Habitat Impairments: Five Mile Creek has become overgrown with tag alder which is causing sedimentation problems including widening and shallowing the stream. Dense tag alder also hinders fishability.

Target Species: Brook and brown trout

Technique or Structure: Material removal (8,900 ft)

Site: Downstream from St. Croix Trail – Washburn County

Project Length: 1,400 Feet

Fiscal Year: 2014

Justification and Purpose: This project was completed to maintain previous habitat work. We repaired one cover that was blowing out behind it as well as re-brushed the stretch to maintain angler access.

Stream Habitat Impairments: The stream had some old habitat work completed that was starting to deteriorate and was becoming useless, therefore, it was necessary to repair it. We also had brushed this stretch in previous years to improve angler access and wanted to retain the access created.

Target Species: Brook and brown trout

Technique or Structure: brushing

Comments and Accomplishments: May need more brushing in the future to maintain access.

Hickey Creek (2) - Barron

Site: Upstream from 13 ¼ St, Barron County

Project Length: 900 Feet

Fiscal Year: 2014

Justification and Purpose: This project lies within the Hickey Creek fishing easement and angler access was difficult due to dense tag alder.

Stream Habitat Impairments: This stretch of Hickey Creek had a dense tag alder canopy inhibiting angler access.

Target Species: Brook and brown trout

Technique or Structure: brushing

Comments and Accomplishments: Completed, may need to be re-brushed in the future.

Iron River (3) - Bayfield

Site: Town of Iron River

Project Length: 2,500 Feet

Fiscal Year: 2013

Justification and Purpose: This portion of the project covers the costs of maintaining extensive channel work completed on the Iron River in 1998 and 1999. Annual maintenance on previously completed trout habitat projects is necessary to insure the aesthetics, function, and longevity of structures installed. Unmaintained devices also pose a threat to public safety and department liability.

Stream Habitat Impairments: Prior to improvement the stream was artificially wide and shallow due to numerous relocations of US Hwy 2 and operation of a hydro-dam just upstream of the project area.

Target Species: Brown trout

Technique or Structure: Beaver dam removal (1), beaver removal (2)

Comments and Accomplishments: Surveillance efforts of habitat work completed on a 0.5 mile section of the Iron River during the late 1990's was found to be functioning as intended and in good condition. Trapping and removal of a beaver dam at the downstream end of the project area was required to alleviate impounding of the habitat improvement structures. Post evaluation surveys on improved sections of the Iron River suggest trout density nearly doubled following habitat restoration activities.

Site: Town of Iron River

Project Length: 2,500 Feet

Fiscal Year: 2014

Justification and Purpose: This project also covered inspection and maintenance of previously completed trout habitat projects on the Iron River in Bayfield County, Wisconsin. Annual inspection and maintenance is necessary to insure the aesthetics, function, and longevity of structures installed. Unmaintained devices also pose a threat to public safety, resource integrity and department liability.

Stream Habitat Impairments: Prior to improvement the stream was artificially wide and shallow due to numerous relocations of US Hwy 2 and operation of a hydrodam just upstream of the project area.

Target Species: Brown trout

Comments and Accomplishments: Surveillance efforts of habitat work completed on a 0.5 mile section of the Iron River during the late 1990's was found to be functioning as intended and in good condition. Post evaluation surveys on improved sections of the Iron River suggest trout density nearly doubled following habitat restoration activities (Table 1)

McKenzie Creek (4) - Washburn

Site Description: McKenzie Creek Fishing Easement, downstream from County Rd K, Washburn County

Project Length: 600 Feet

Fiscal Year: 2014

Justification and Purpose: This stretch of stream was having sedimentation issues causing widening and shallowing of the stream, therefore, tag alder was removed to increase sediment transport, stabilize banks, and improve fishing access.

Stream Habitat Impairments: A dense tag alder canopy was causing sedimentation issues as well as inhibiting angler access.

Target Species: Brook trout

Technique or Structure: brushing

Comments and Accomplishments: Needs to be finished brushing to federal land once beaver activity has been controlled.

North Fork Clam River (5) - Burnett

Site Description: downstream of bridge crossing on Heart Lake Rd

Project Length: 400 Feet

Fiscal Year: 2013

Justification and Purpose: The purpose of this project was to replace failing covers that were installed in the early 80's, and to dig a plunge pool deeper.

Stream Habitat Impairments: This stretch of river is lacking overhead cover, and a plunge pool had filled in with sediment.

Target Species: Brook and brown trout

Technique or Structure: LUNKERS (80 ft, 1), plunge pool (1)

Site Description: downstream of bridge crossing on Heart Lake Rd

Project Length: 9,800 Feet

Fiscal Year: 2014

Justification and Purpose: This project was completed to stabilize streambanks and improve angler access, as well as maintain the brushing completed in previous fiscal year. There were also five luncker structures that had half logs replaced to prolong the life of the structures.

Stream Habitat Impairments: The stream was having sedimentation issues causing a widening and shallowing of the stream.

Target Species: Brook and brown trout

Technique or Structure: structure replacement

Comments and Accomplishments: This project was completed.

Site Description: Clam River Fisheries Area- Rockaway Farm

Project Length: 2,200 Feet

Fiscal Year: 2013

Justification and Purpose: The purpose of this project was to increase habitat for adult trout by increasing the amount of overhead cover and pool habitats.

Stream Habitat Impairments: This stretch of river is lacking overhead cover and pool habitats, as well as, some bank stabilization issues.

Target Species: Brook and brown trout

Technique or Structure: LUNKERS (210 ft, 5), Material removal (2200 ft), boulder clusters (10), rip rap (200 ft), log, rootwad and boulder revetments (6), plunge pools (4).

Comments and Accomplishments:

South Fork White River (6) - Bayfield

Site Description: White River Fisheries Area

Project Length: 3,400 Feet

Fiscal Year: 2013

Justification and Purpose: The South Fork of the White River is cold headwater tributary to the White River and premier trout stream to both Bayfield County and the State of Wisconsin. The South Fork supports viable sport fisheries for both brown and brook trout and is also known to support spawning migrations of brown trout from the White River's mainstem. The entire stream thread lies within the White River Fishery Area, which was established in 1961 to insure public access to this unique resource and to protect this sensitive watershed from logging and development pressures. Prior to acquisition by the state, much of the South Fork's 2.3 miles of stream thread was impounded by a series of artificial lakes maintained by previous proprietors for trout propagation and private fishing. Through WDNR efforts ranging from dam removal, dredging, and intensive channel work much of the stream has been restored.

Although past restorations efforts included stream brushing much of the streams riparian corridor is densely vegetated and dominated by the exotic shrubs common buckthorn (*Rhamnus cathartica*) and glossy buckthorn (*Rhamnus frangula*). The invasive shrubs dominate the riparian forest community resulting in allelopathic elimination of native forest species. Buckthorn dominance in the riparian flora is reducing veg-

etative diversity and is inhibiting regeneration of large woody species native to lowland forests and beneficial to stream ecosystems. The dense buckthorn canopy is also resulting in an overly shaded stream environment, thereby reducing stream productivity. In addition, densely shaded stream threads lack aquatic vegetation which provides important cover for juvenile trout and non-game fish species.

Stream Habitat Impairments: Although past restorations efforts included stream brushing much of the streams riparian corridor is densely vegetated and dominated by the exotic shrubs common buckthorn (*Rhamus cathartica*) and glossy buckthorn (*Rhamnus frangula*). The invasive shrubs dominate the riparian forest community resulting in allelopathic elimination of native forest species. Buckthorn dominance in the riparian flora is reducing vegetative diversity and is inhibiting regeneration of large woody species native to lowland forests and beneficial to stream ecosystems. The dense buckthorn canopy is also resulting in an overly shaded stream environment, thereby reducing stream productivity. In addition, densely shaded stream threads lack aquatic vegetation which provides important cover for juvenile trout and non-game fish species.

The South Fork is an important cold water tributary to the White River with its entire length flowing through the White River Fishery Area. The stream supports popular and self-sustaining fisheries for both brown trout and brook trout and receives spawning migrations of brown trout from the White River. The White River Fisheries Area was acquired with a commitment to protect this watershed and manage it in a manner conducive to maintaining high quality riparian habitats and cold water resources. Heavy canopies of the exotic buckthorn have resulted in densely shaded stream environment, reducing stream productivity and habitat quality for trout. Riparian control of invasive buckthorns will help improve biotic and abiotic conditions for trout and aid the recruitment of large woody species critical to the stream's future health. No effort to control these species only stands to upset the important relationships between riparian habitat and stream quality and seems contrary to the Department priority of invasive species control.

Target Species: Brown trout

Technique or Structure: Riparian Forest buffers, brush removal

Partners: Wildlife Management (labor and heavy equipment, mechanical cutting)

Comments and Accomplishments: Work in FY13 involved restoration of riparian zones along stream corridors intensively improved since the mid 1990's. Fisheries work conducted included foliar treatments to control buckthorn regeneration in a 2,900 foot stretch of stream corridor intensively brushed and treated in previous fiscal years and manual brushing and control on an additional 500 feet of stream corridor in October and November 2012 (Figure 1). The project was cooperatively expanded in FY12 and FY 13 to include mechanical brushing of a 3.0 acre area of dense buckthorn stands adjacent to the project area by Wildlife Management. All buckthorn saplings were foliar sprayed with

a 2% solution of Garlon while all native species were preserved. Cut stumps remaining from manual clearing in the 500 foot of stream corridor not previously brushed were treated with a 25% solution of Garlon 4 and mineral oil. Prior to this effort the invasive species, common buckthorn, *Rhamus cathartica* and glossy buckthorn *Rhamnus frangula* dominated the riparian zones along this section of stream, resulting in allelopathic elimination of native forest species (Figure 2). In order to enhance regeneration of large woody species important to stream ecosystems, an additional 200 black cherry, *prunus serotina* and 50 swamp white oak, *Quercus bicolor* were planted in the treatment area. Work in FY 14 calls for follow up foliar treatments to control buckthorn regeneration in the 12 acre area treated thus far and manual brushing and control in the 700 foot of stream corridor lying just upstream of the main parking lot off Delta-Drummond Road. Further expansion of this successful control effort to adjacent stream corridors will depend on manpower and funding constraints.

Site Description: Township of Delta, Bayfield County

Project Length: 7,920 Feet

Fiscal Year: 2014

Justification and Purpose: This project also covered inspection and maintenance of previously completed trout habitat projects on the South Fork of the White River in Bayfield County, Wisconsin. Annual maintenance on previously completed trout habitat projects is necessary to insure the aesthetics, function, and longevity of structures installed. Unmaintained devices also pose a threat to public safety, resource integrity and department liability.



South Fork White River: riparian corridor prior to treatment



South Fork White River: riparian corridor after treatment

Stream Habitat Impairments: Deteriorating boom-covers and wing deflectors constructed during the late 1960's through early 1980's were replaced in 1994 – 1996 and 2006 - 2007 (Figure 1). In excess of 30 years old, these devices were collapsed, creating deleterious flows, bank erosion, and displeasing aesthetics (Figure 2).

Target Species: Brown trout

Technique or Structure: Surveillance of habitat work

Partners:

Comments and Accomplishments: Surveillance of intensive habitat work completed on a 1.5 mile section of South Fork since the mid 1990's found all structures in excellent condition and functioning as intended. A service road used for access to this popular area however, required repair due to a significant washout in the spring of 2013.

Unnamed Tributary to White River (7) - Bayfield

Site Description: Former Lebel property now owned by WDNR

Project Length: 600 Feet

Fiscal Year: 2014

Justification and Purpose: Remove historic dam on former Lebel property. Property was acquired by WDNR in 2012 and had an existing dam that served a historic fish hatchery. Purpose was to restore fish passage and remediate high water temperatures due to the impoundment created by the dam and restore fish passage and brook and brown trout spawning areas located upstream of the dam.

Stream Habitat Impairments: The dam created an impoundment that raised water temperatures as well as blocked fish passage to upstream cold water sources.

Target Species: Brook and brown trout

Technique or Structure: Dam removal (100 ft, 1), bank

shaping and planting (100 ft), bank sloping (100 ft)

Comments and Accomplishments: Dam has been removed, banks sloped and site stabilized

Site Description: White River Fisheries Area

Project Length: 7,920 Feet

Fiscal Year: 2013

Justification and Purpose: This portion of the project covered the costs of maintaining extensive channel work completed on the South Fork of the White River in Bayfield County. Habitat structures placed during various projects since the acquisition of the White River Fisheries Area in 1961 are aging and will increasingly becoming in need of repair or replacement. Annual maintenance on previously completed trout habitat projects is necessary to insure the aesthetics, function, and longevity of structures installed. Unmaintained devices also pose a threat to public safety and department liability.

Stream Habitat Impairments: Poor width to depth ratio, continued extreme sediment bedload and primarily box elder riparian margin limited the possibility of eventual self-stabilization and trout habitat improvement in a reasonable time frame.

Target Species: Brook trout

Technique or Structure: bank shaping and planting, bank sloping, boulder clusters (150 ft, 15), channel shaping (600 ft), log, rootwad and boulder revetments (200 ft, 25), LUNKERS (160 ft, 20), boulder retard (50 ft, 25), rip rap (2,600 ft)

Partners: Excel Energy, Fairmount Minerals, Trimble Rod and Gun Association, Trout and Salmon Foundation, Kiaptuwish Trout Unlimited (entire project), Friends of Wisconsin Trout Unlimited, Guadalupe NM Chapter Trout Unlimited, Patagonia Corporation, National Fish and Wildlife Foundation, James E Dutton Foundation (materials)

Comments and Accomplishments: Project completed

Yellow River (8) - Barron

Site Description: downstream of bridge crossing on Heart Lake Rd

Project Length: 6,900 Feet

Fiscal Year: 2014

Justification and Purpose: This stretch of the Yellow River was brushed from bank to bank to improve angler access in the Yellow River Fisheries Area.

Stream Habitat Impairments: This stretch of River had a very dense canopy of tag alder which made angler access difficult.

Target Species: Brook and brown trout

Technique or Structure: brushing

Comments and Accomplishments: This stretch was completed.

Culvert Assessment

Site Description: Bayfield and Douglas Counties

Project Length:

Fiscal Year: 2013

Justification and Purpose: By gathering culvert assessment data crossings that are posing a problem can be

identified and ranked, thus enabling a more efficient use of public dollars for repair/replacement. In 2013-14 biennium we plan to share the data with local units of government and conservation groups to begin the process of prioritization and replacement of culverts that block fish movement.

Stream Habitat Impairments: Poorly designed or installed culverts pose several problems. Culverts often act as barriers to passage of aquatic organisms, fragmenting habitat and potentially isolating populations from critical spawning, rearing or feeding habitats. Poorly designed or installed crossings can also cause stream banks to erode, contributing sediment to streams. They frequently wash out, damaging habitat downstream and adding expense to town road budgets. Crossings act as both chronic and acute sources of nonpoint source sediment pollution throughout the basin, which several agencies have identified as a major concern in the Upper St. Croix River basin.

Target Species: Brook and brown trout

Technique or Structure:

Comments and Accomplishments: A total of 48 culverts in Bayfield County and 62 in Douglas County were measured, of these 41 were determined fish passage barriers based on the amount of stream reconnected for aquatic organism passage and value of the fishery. The goal and plan for the future is to approach townships to see if they are willing to partner to replace culverts which are causing fish passage issues.

Culvert Assessment

Site Description: Washburn and Burnett Counties

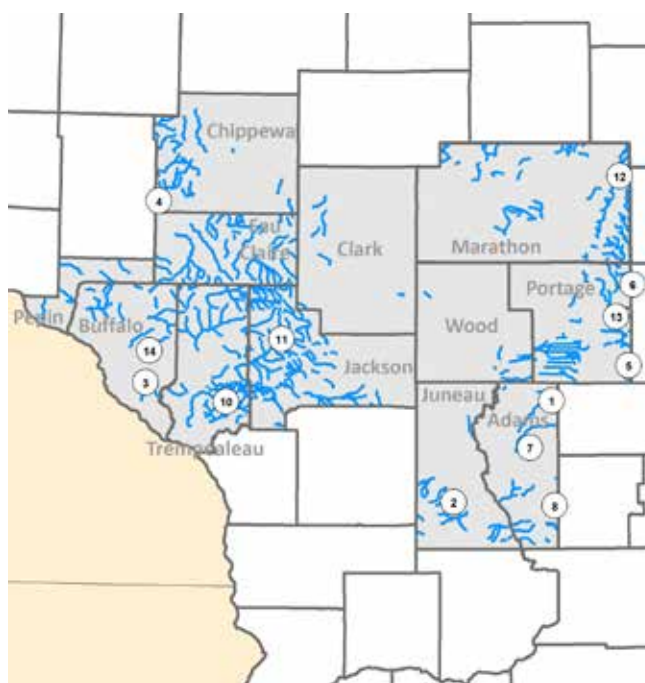
Fiscal Year: 2014

Justification and Purpose: By gathering culvert assessment data at crossings that are posing a problem can be identified and ranked, thus enabling a more efficient use of public dollars for repair/replacement. In 2014-15 biennium we plan to share the data with local units of government and conservation groups to begin the process of prioritization and replacement of culverts that block fish movement.

Stream Habitat Impairments: Poorly designed or installed culverts pose several problems. Culverts often act as barriers to passage of aquatic organisms, fragmenting habitat and potentially isolating populations from critical spawning, rearing or feeding habitats. Poorly designed or installed crossings can also cause stream banks to erode, contributing sediment to streams. They frequently wash out, damaging habitat downstream and adding expense to town road budgets. Crossings act as both chronic and acute sources of nonpoint source sediment pollution throughout the basin, which several agencies have identified as a major concern in the Upper St. Croix River basin.

Target Species: Brook and brown trout

Comments and Accomplishments: Assessed 55 of the 98 crossings in Washburn and Burnett Counties. The remainder will be assessed and ranked in the next fiscal year.



Wisconsin Rapids Field Unit

2013 Estimated Expenses: \$161,316

2014 Estimated Expenses: \$185,627

Big Roche A Cri Creek (1) - Adams

Site Description: Archer Drive

Fiscal Year: 2013

Justification and Purpose: To backfill in structures installed in the 1980's that have become dangerous for the public to walk on.

Stream Habitat Impairments: Safety issues for anglers accessing the trout stream.

Target Species: Brook trout

Technique or Structure: Brush bundle/mattresses (5)

Partners: Village of Plover, City of Stevens Point, Village of Amherst, City of Wisconsin Rapids, Village of Park Ridge (collected and stored Christmas trees)

Comments and Accomplishments: Project will continue for the next fiscal year.

Site Description: Archer Drive

Fiscal Year: 2014

Justification and Purpose: The Big Roche-A-Cri Creek is a class 1 trout stream containing strong natural reproducing populations of brook and brown trout. A project was completed in 1979 to increase stream habitat. Most of the previously installed structures needed to be maintained as they have collapsed or are very weak and will collapse in the near future. Projects have been completed in the past upstream with very positive results. The work during fiscal year 2014 was to mainly acquire materials for the instream portion of the work which began in fiscal year 2015.

Stream Habitat Impairments: Collapsing overhead bank covers. Wide stream channel, lack of mid channel cover.

Target Species: Brook trout

Partners: Bill Bruce (materials - Donated many trees to be cut down and used as pilings for our jetted overhead bank covers)

Comments and Accomplishments: Project will continue for the next fiscal year.

Brewer Creek (2) - Juneau

Site Description: Brokup Road, Lindina Township, Juneau County

Project Length: 3,200 feet

Fiscal Year: 2014

Justification and Purpose: To maintain previously brushed stream banks and clear windfallen trees to prevent streambank erosions and make stream more accessible for anglers.

Stream Habitat Impairments: Tag Alder, Honey Suckle and Buckthorn have taken over the streambank.

Target Species: Brook trout

Technique or Structure: brush removal (6,400 ft)

Partners:

Comments and Accomplishments: Project completed

Disco Branch Creek

Fiscal Year: 2014

Justification and Purpose: Locate and remove beaver dams on area Class I and II trout streams

Stream Habitat Impairments: impediment to fish migration, sedimentation, water temperature increase

Target Species: Brook and brown trout

Technique or Structure: beaver dam removal (7)

Eagle Valley Creek (3) - Buffalo

Site Description: Buffalo County – Stettler Easement

Project Length: 2,000 Feet

Fiscal Year: 2014

Justification and Purpose: Stabilize eroding stream banks, improve in-stream habitat for fish. ***Completes multi-year project started in 2010. Entire length is 5400 feet.

Stream Habitat Impairments: eroding stream banks, lack of in-stream habitat

Target Species: Brook trout

Technique or Structure: LUNKERS (96 ft, 11), rip rap (3,000 ft)

Comments and Accomplishments: Project completed

Elk Creek (4) - Chippewa

Site Description: Chippewa County

Project Length: 550 Feet

Fiscal Year: 2013

Justification and Purpose: The project site was located in an area where the creek had eroded into the high valley wall and created a vertical sand scarp approximately 30' in height. Collapsing trees and channel migration threatened to destabilize the channel configuration past habitat/stabilization measures. Huge volumes of sediment were filling pools and creating aggressive mean-

der conditions. Quality downstream trout habitat was consequently compromised or of poor quality.

Stream Habitat Impairments: Extreme accelerating bank erosion and channel migration with subsequent sedimentation of trout habitat. Due to periodic flooding events few amounts of woody cover remains in the stream and is carried to shallow margins with little trout cover benefit.

Target Species: Brook and brown trout

Technique or Structure: Bank shaping and planting (500 ft), bank sloping (500 ft), boulder retard (20 ft, 5), boulder clusters (20 ft, 3), grade control measures (1), erosion control hydro seed mulch (500 ft), rip rap (500 ft)

Partners: Natural Resource Conservation Service (materials), Clear Water Trout Unlimited and Chippewa Valley Resource Alliance (funding for entire project)

Comments and Accomplishments: Project completed

Emmons Creek (5) - Portage

Site Description: Stratton Lake Road

Fiscal Year: 2013

Justification and Purpose: To maintain previously installed brush bundles

Stream Habitat Impairments: habitat improvements need repair to prevent failure over time.

Target Species: Brown trout

Technique or Structure: Brush bundle/mattresses (10)

Partners: Bill Cook Chapter of the Izaak Walton League (work day to install 1008 Christmas trees and repair existing bundles), Village of Plover, City of Stevens Point, Village of Amherst, City of Wisconsin Rapids, Village of Park Ridge (collected and stored Christmas trees)

Comments and Accomplishments: Project will continue for the next 2 fiscal years. This project is an annual work event in cooperation with the Bill Cook Chapter of the Izaak Walton League.

Fiscal Year: 2014

Justification and Purpose: To maintain previously installed X-mas tree bundles. During the spring and summer of 2006 and 2007, 52 brush bundles consisting of collected Christmas Trees were used to narrow the stream channel. In return this sped up the flow of the water as well as washed away unwanted sediment from the stream bottom exposing substrate more suitable for trout spawning. Many of the bundles have not collected enough sediment to completely fill in and allow grasses to take hold. With the addition of more trees to the existing bundles sediment will continue to be deposited and eventually grasses will take hold forming a stream bank.

Stream Habitat Impairments: Stream is wide and shallow. The main substrate is sand but gravel exists under the sand.

Target Species: Brown trout

Technique or Structure: Brush bundle/mattresses (675 ft, 9)

Partners: Bill Cook Chapter of the Izaak Walton League (materials - Club donated a gift for our mileage costs on our work truck which are accumulated when picking up and delivering Christmas trees to the work site), Village of Plover, City of Stevens Point, Village of Park

Ridge and Township of Hull (materials - Stockpiled 947 collected Christmas trees for us to be used on the project instead of chipping them)

Comments and Accomplishments: Project will continue for the next 2 fiscal years. This project is an annual work event in cooperation with the Bill Cook Chapter of the Izzak Walton League.

Flume Creek (6) - Waupaca

Site Description: Town of Northland, Town of Harrison

Project Length: 1,100 Feet

Fiscal Year: 2014

Justification and Purpose: The Flume Creek is a class 1 trout stream containing strong natural reproducing populations of brook and brown trout. A dam was removed at the site in the early 1990's. A project was completed in 1996 to increase stream habitat. Some of the previously installed structures needed to be maintained and it was also determined that more overhead covers would be beneficial to fish habitat. Projects have been completed in the past upstream with very positive results.

Stream Habitat Impairments: Stream Bank erosion, lack of overhead cover and large boulders instream which needed to be re-arranged to allow water to flow freely.

Target Species: Brook and brown trout

Technique or Structure: LUNKERS (216 ft, 27), boulder retard (15), trees/rootwads (2), log/brush/rock shelters (4), wing deflector (75 ft, 1)

Comments and Accomplishments: Project completed

Jermstad Creek

Fiscal Year: 2014

Justification and Purpose: Locate and remove beaver dams on area Class I and II trout streams

Stream Habitat Impairments: impediment to fish migration, sedimentation, water temperature increase

Target Species: Brook and brown trout

Technique or Structure: beaver dam removal (1)

Little Roche-A-Cri Creek (7) - Adams

Site Description: Preston Township 8th Avenue downstream to 8th Drive

Project Length: 5,987 feet

Fiscal Year: 2014

Justification and Purpose: An intensive project had been done previously at this site during the summer of 1985. In the summer of 2012 an electrofishing survey was completed. Access to the stream was very difficult due to dense tag alder and many windfallen trees. Due to this, it was determined that a stream brushing project be completed to open the stream making access easier for anglers as well as lessen erosion of the stream bank from the fallen trees.

Stream Habitat Impairments: Dense Tag alder and many windfallen trees.

Target Species: Brook trout

Technique or Structure: Brush removal (11,974 ft)

Comments and Accomplishments: Project completed

Neenah Creek (8) - Adams

Site Description: 1st Lane Adams County

Fiscal Year: 2013

Justification and Purpose: To restore habitat structures installed in 1983 that had failed over time

Stream Habitat Impairments: prevent previously installed habitat structures from falling into stream and provide safe access for anglers.

Target Species: Brown trout

Technique or Structure: Overhead bank cover (1,016 ft, 21), boulder retard (29), LUNKERS (144 ft, 18), trees/rootwads (3), plunge pools (5), brush bundle/mattresses (150 ft, 3)

Partners: State Chapter of Izaak Walton League (funding to purchase rock and hauling), Frank Hornberg Chapter of Trout Unlimited (funding to purchase lumber), Village of Plover, City of Stevens Point, Village of Amherst, City of Wisconsin Rapids, Village of Park Ridge (collected and stored Christmas trees)

Comments and Accomplishments: Project will continue for the next fiscal year.

Site Description: 1st Lane Adams County

Project Length: 3,500 Feet

Fiscal Year: 2014

Justification and Purpose: Neenah Creek is a class 1 trout stream, supporting healthy naturally reproducing populations of Brown Trout. It is one of the most heavily utilized trout streams in Adams County. During the summer of 1983 an intensive trout habitat development was completed. All of the installed jetted overhead bank covers had failed. The goal of the project was to remove all previously installed covers and replace them with new materials. Also, sandbags had been used to backfill the original installed covers. All sandbags were removed and the new covers were backfilled using field stone.

Stream Habitat Impairments: In the summer of 1983 41 jetted overhead bank covers totaling two thousand and fifty four feet were installed instream. During an observation in 2010 it was documented that all of the covers had collapsed and were not providing any overhead cover at all. Sandbags were used to cover the structures and the stream bed was littered with worn out bags as well. Tag Alder also had become the dominant vegetation on the streambank choking the stream off and making angler access nearly impossible.

Target Species: Brown trout

Technique or Structure: boulder retard (21), plunge pools (4), trees/rootwads (4), LUNKERS (200 ft, 24), overhead bank cover (135 ft, 3), brush bundle/mattresses (4), bank shaping and planting (650 ft, 13)

Partners: Frank Hornberg Chapter of Trout Unlimited (materials - rock acquisition)

Comments and Accomplishments: Project complete

North Fork Beaver Creek (10) - Trempealeau

Site Description: Village of Ettrick property

Project Length: 2,200 Feet, 800 ft

Fiscal Year: 2014

Justification and Purpose: Restore habitat, minimize

bank erosion, improve fishing conditions/angler opportunities, ongoing project which was initiated in 2012

Stream Habitat Impairments: highly erodible banks, few pools or overhead cover for adult brook trout, instream woody debris unstable

Target Species: Brook trout

Technique or Structure: Brush removal (1,000 ft), bank shaping and planting (1,600 ft), bank sloping (1,600 ft), brush removal (600 ft), plunge pools (6), grade control measures (6), island building (10 ft, 1), material removal (1,600 ft), rip rap (1,600 ft), weir (6), trees/rootwads (30)

Partners: Village of Ettrick (materials – lumber for overhead jetted structures, grass seed, mulch), Ettrick Rod and Gun Club/Trempealeau County Associated Clubs (materials-rock rip rap)

North Fork Buffalo River

Fiscal Year: 2014

Justification and Purpose: Locate and remove beaver dams on area Class I and II trout streams

Stream Habitat Impairments: impediment to fish migration, sedimentation, water temperature increase

Target Species: Brook and brown trout

Technique or Structure: beaver dam removal (1)

North Fork Trempealeau River (11) - Jackson

Site Description: Hixton Township Jackson County

Fiscal Year: 2013

Justification and Purpose: To restore brook trout habitat, to fix or remove previously installed habitat structures and improve fishability with the removal of blown down trees caused by severe storms.

Stream Habitat Impairments: storm damage blown down trees and failing habitat structures making unsafe conditions for anglers and reducing available habitat for fish.

Target Species: Brook trout

Technique or Structure: Brush removal (2,450 ft), log/brush/rock shelters (30), bank shaping and planting (1,650 ft), rip rap (1,650 ft), bank sloping (1,650 ft), plunge pools (44 ft, 3), wing deflector (3)

Comments and Accomplishments: This project will continue once the project on the North Fork Beaver Creek is completed

Plover River (12) - Marathon

Site Description: CTH Z Marathon County

Project Length: 2,500 Feet

Fiscal Year: 2014

Justification and Purpose: A project was completed in the 1980's. During a stream electrofishing survey, it was documented that a good majority of the stream was choked with tag alder making it nearly impossible for angling. A brushing project was completed to open the stream up, increase stream flows and make it accessible to anglers.

Stream Habitat Impairments: Dense Tag Alder choking the stream.

Target Species: Brook and brown trout

Technique or Structure: Brush removal (5,000 ft)

Partners: Comments and Accomplishments: Project completed

South Fork Buffalo River

Fiscal Year: 2014

Justification and Purpose: Locate and remove beaver dams on area Class I and II trout streams

Stream Habitat Impairments: impediment to fish migration, sedimentation, water temperature increase

Target Species: Brook and brown trout

Technique or Structure: beaver dam removal (1)

Tomorrow River (13) - Portage

Site Description: Lake Meyers Road – Portage County

Fiscal Year: 2013

Justification and Purpose: To narrow channel increasing instream depth and provide additional overhead cover.

Stream Habitat Impairments: This location of the stream is very wide and shallow that could have the potential to be a thermal barrier to trout.

Target Species: Brook and brown trout

Technique or Structure: LUNKERS (192 ft, 24), wing de-



Upper Tomorrow River: boulder retard placement, wing deflector on right, LUNKER installation upstream left

flector (200 fr, 4), plunge pools (1), boulder retard (50), trees/rootwads (5), island building (200 ft, 2)

Partners: Robert Lea (landowner, excavation and heavy equipment work), Frank Hornberg Chapter of Trout Unlimited (moved rocks and structures), Portage County NRCS (provided funding to Robert Lea)

Site Description: 3000 feet upstream of Lake Meyers Rd
Fiscal Year: 2014

Justification and Purpose: To narrow the channel of the stream using wing deflectors. Lunker structures were installed to provide lacking overhead cover for trout. Mid channel cover was also lacking, therefore boulders were installed to provide cover.

Stream Habitat Impairments: This location of the stream is very wide (average width 43.6' wide) and shallow

(average depth 1.35' deep) that could have the potential to be a thermal barrier to trout. Overhead and mid channel cover severely lacking.

Target Species: Brook and brown trout

Technique or Structure: LUNKERS (255 ft, 30), wing deflector (600 fr, 5), boulder retard (50)

Partners: Portage County NRCS (materials - covered all of the materials necessary. Lumber for lunkers as well as other materials necessary for lunker creation, rock for backfill, boulders for midstream), Amherst Excavating (labor - Provided equipment (excavator and front end loader) for habitat development), Frank Hornberg Chapter of Trout Unlimited (labor - 3-5 people from the chapter came to provide labor for lunker structure installation and building.)

Upper Tomorrow River: boulder retard placement, wing deflector on right, LUNKER installation upstream left

Waumandee Creek (14) - Buffalo

Site Description: Schmidtknecht Easement

Fiscal Year: 2013

Justification and Purpose: Tree/brush removal

Stream Habitat Impairments: erosion, steep banks, lack of in-stream habitat

Technique or Structure: LUNKERS (90 ft, 6), plunge pools (70 ft, 7), bank shaping and planting (1,900 ft)

Site Description: Schmidtknecht Easement

Fiscal Year: 2014

Project Length: 1,500 feet

Justification and Purpose: Stabilize eroding stream banks. Improve habitat for trout.

Stream Habitat Impairments: Steep eroding stream banks, lack of in-stream cover for fish.

Technique or Structure: Rip rap (1,900 ft), LUNKERS (136 ft, 6), weir (100 ft, 5)

Partners: Trout Unlimited (materials- rock), Clear Waters Trout Unlimited (materials - rock), Waumandee R/G + CC AIDS (materials and labor - rock-face rock, lunkers, labor 105 hours), Schmidtknecht Family (materials, equipment, labor (off road dump, tractor/spreader, labor 42 hours), Conservation Club Gift Account (machine time - excavator, dozer, track loader)

Black River Falls Beaver Control

Site Description: Jackson and Trempealeau Counties

Fiscal Year: 2013

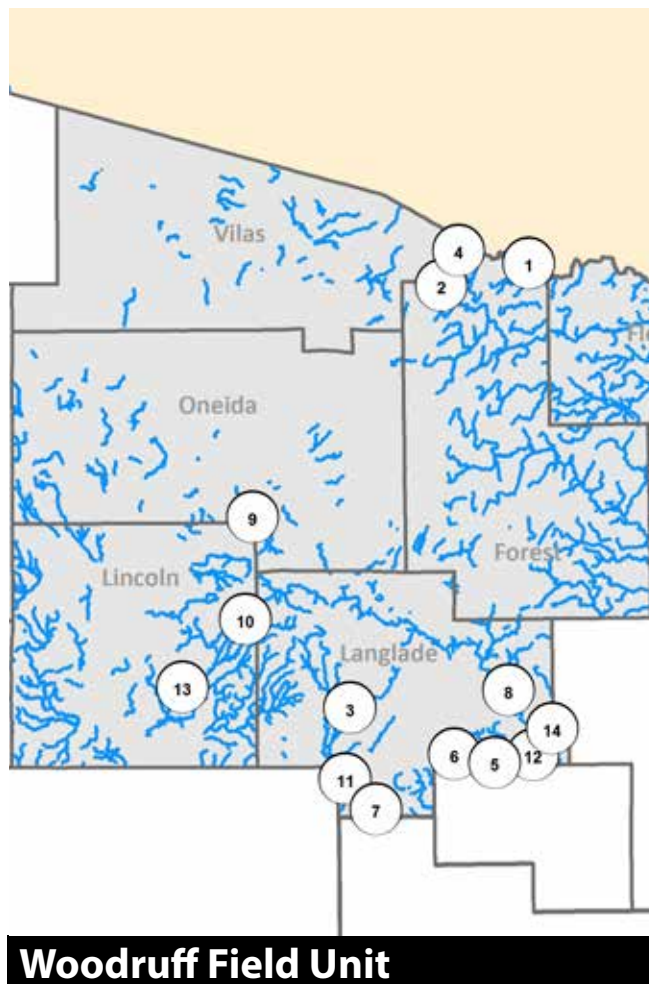
Justification and Purpose: Locate and remove beaver and beaver dams on area Class I and II trout streams

Stream Habitat Impairments: Beaver Dams, impounding water on cold water resources and also affecting restored habitat projects. Waters with dam removals were North Buffalo, South Buffalo, Stockwell (Halls) Creek West Fork Halls Creek and North Branch Trempealeau River in Jackson County. North Creek in Trempealeau County.

Target Species: Brook and brown trout

Technique or Structure: Beaver dam removal (16), beaver removal (21)

Comments and Accomplishments: Beaver and beaver dam removal needs continued efforts to prevent damming up of cold water resources.



Woodruff Field Unit

2013 Estimated Expenses: \$137,401

2014 Estimated Expenses: \$111,314

Allen Creek (1) - Forest

Fiscal Year: 2014

Project Length: 2,100 Feet

Justification and Purpose: Brush out historical habitat project sites and open up stream corridor for better angling access.

Stream Habitat Impairments: Difficult access due to overgrowth of tag alder.

Target Species: Brook and brown trout

Technique or Structure: Brush bundle/mattresses

Brule Creek (2) - Vilas

Fiscal Year: 2014

Project Length: 635 Feet

Justification and Purpose: Brush out historical habitat project sites and open up stream corridor for better angling access.

Stream Habitat Impairments: Difficult access due to over growth of tag alder.

Target Species: Brook and brown trout

Technique or Structure: Brush bundle/mattresses

East Branch Eau Claire River (3) - Langlade

Site Description: downstream from Bluebell Road

Fiscal Year: 2013 and 2014

Project Length: 1,848 Feet

Justification and Purpose: Remove tag alder canopy over stream and open up corridor for angling, increase light penetration to increase productivity of stream, and remove tags from water to increase flow.

Stream Habitat Impairments: Limited access due to dense tag alder growth. A few areas in stream project area had silted bottom and lack of woody cover.

Target Species: Brook trout

Technique or Structure: brush removal (1,848 ft)

Partners: Trout Unlimited donated gift account for a Brush Crew which assisted in completion of project

Comments and Accomplishments: project complete

Site Description: downstream from HWY C

Fiscal Year: 2013 and 2014

Project Length: 1,109 Feet

Justification and Purpose: Remove tag alder canopy over stream and open up corridor for angling, increase light penetration to increase productivity of stream, and remove tags from water to increase flow.

Stream Habitat Impairments: Limited access due to dense tag alder growth. A few areas in stream project area had silted bottom and lack of woody cover.

Target Species: Brook trout

Technique or Structure: brush removal (1,109 ft)

Partners: Trout Unlimited donated gift account for a Brush Crew which assisted in completion of project

Comments and Accomplishments: project complete

Site Description: downstream from HWY 45

Fiscal Year: 2013 and 2014

Project Length: 1,320 Feet

Justification and Purpose: Remove tag alder canopy over stream and open up corridor for angling, increase light penetration to increase productivity of stream, and remove tags from water to increase flow.

Stream Habitat Impairments: Limited access due to dense tag alder growth. A few areas in stream project area had silted bottom and lack of woody cover.

Target Species: Brook trout

Technique or Structure: brush removal (1,320 ft)

Partners: Trout Unlimited donated gift account for a Brush Crew which assisted in completion of project

Comments and Accomplishments: project complete

Site Description: Pingel's

Fiscal Year: 2013 and 2014

Project Length: 1426 Feet

Justification and Purpose: Remove tag alder canopy over stream and open up corridor for angling, increase

light penetration to increase productivity of stream, and remove tags from water to increase flow.

Stream Habitat Impairments: Limited access due to dense tag alder growth. A few areas in stream project area had silted bottom and lack of woody cover.

Target Species: Brook trout

Technique or Structure: brush removal (1,426 ft.)

Partners: Trout Unlimited donated gift account for a Brush Crew which assisted in completion of project

Comments and Accomplishments: project complete

Site Description: Downstream from CTH I

Fiscal Year: 2013 and 2014

Project Length: 2270 Feet

Justification and Purpose: Remove tag alder canopy over stream and open up corridor for angling, increase light penetration to increase productivity of stream, and remove tags from water to increase flow.

Stream Habitat Impairments: Limited access due to dense tag alder growth. A few areas in stream project area had silted bottom and lack of woody cover.

Target Species: Brook trout

Technique or Structure: brush removal (2,270 ft.)

Partners: Trout Unlimited donated gift account for a Brush Crew which assisted in completion of project

Comments and Accomplishments: project complete

Site Description: Incha's

Fiscal Year: 2013

Project Length: 1267 Feet

Justification and Purpose: Remove tag alder canopy over stream and open up corridor for angling, increase light penetration to increase productivity of stream, and remove tags from water to increase flow.

Stream Habitat Impairments: Limited access due to dense tag alder growth. A few areas in stream project area had silted bottom and lack of woody cover.

Target Species: Brook trout

Technique or Structure: brush removal (1267 ft.)



Evergreen River 2012 Project Area – channel shaping and tree/rootwads installed.

Partners: Trout Unlimited donated gift account for a Brush Crew which assisted in completion of project
Comments and Accomplishments: project complete

Elvoy Creek (4) - Forest

Project Length: 2,200 Feet

Fiscal Year: 2014

Justification and Purpose: Brush out historical habitat project sites and open up stream corridor for better angling access.

Stream Habitat Impairments: Difficult access due to over growth of tag alder.

Target Species: Brook and brown trout

Technique or Structure: Brush bundle/mattresses



Evergreen River 2012 Project Area – Brush Bundling

Evergreen River (5) - Langlade

Site Description: 2012 Project Area

Project Length: 2323 Feet

Fiscal Year: 2013

Justification and Purpose: Restore stream channel. Promote scouring of thalweg to increase spawning habitat. Increase recruitment while providing additional cover for juvenile and adult fish.

Stream Habitat Impairments: This stream has silted riffle and run areas, a lack of woody cover and mean stream channel width is too wide and shallow.

Target Species: Brook trout

Technique or Structure: Brush bundle/mattresses (679 ft.), boulder cluster (679 ft., 7), trees/rootwads (2323 ft., 200), channel shaping (1644 ft.), brush removal (2323 ft.)

Partners: Trout Unlimited donated gift account for a Brush Crew which assisted in completion of project

Comments and Accomplishments: project complete

Site Description: Stamper Road

Project Length: 2,376 Feet

Fiscal Year: 2013 and 2014

Justification and Purpose: Remove tag alder canopy over stream and open up corridor for angling, increase light penetration to increase productivity of stream, and remove tags from water to increase flow.

Stream Habitat Impairments: Limited access due to dense tag alder growth. A few areas in stream project area had silted bottom and lack of woody cover.

Target Species: Brook and brown trout

Technique or Structure: Brush removal (2376 ft.)

Partners: Trout Unlimited donated gift account for a Brush Crew which assisted in completion of project

Comments and Accomplishments: Project Complete

Karberger Springs (6) - Langlade

Fiscal Year: 2013

Justification and Purpose: Remove sediment from spring pond to create an average depth of 8 feet, to a max depth of 12 feet. Flush gravel areas in pond to promote natural recruitment of brook trout. Install whole logs and woody cover for additional habitat features. Improve recruitment to entire Drew Creek watershed by restoring habitat.

Stream Habitat Impairments: Heavy silt deposits. Restore spring pond depth from current mean depth of 1-2 feet, to approximately 8 feet in depth.

Target Species: Brook trout

Technique or Structure: Material removal (40,000 Cu. Yds. Dredged)

Comments and Accomplishments: Project Complete

Middle Branch Embarrass (7) - Langlade

Site: Huggins Road to Heinrich's Project Area

Project Length: 4,910 Feet

Fiscal Year: 2014

Justification and Purpose: Remove tag alder canopy over stream and open up corridor for angling, increase light penetration to increase productivity of stream, and remove tags from water to increase flow.

Stream Habitat Impairments: Limited access due to dense tag alder growth. A few areas in stream project area had silted bottom and lack of woody cover.

Target Species: Brook trout

Technique or Structure: brush removal (4,910 ft.)

Partners: Trout Unlimited donated gift account for a Brush Crew which assisted in completion of project

Comments and Accomplishments: Project complete

Ninemile Creek (8) - Langlade

Site: Upstream and downstream of STH 55

Project Length: 3,907 Feet

Fiscal Year: 2013 and 2014

Justification and Purpose: Remove tag alder canopy over stream and open up corridor for angling, increase light penetration to increase productivity of stream, and remove tags from water to increase flow. Restore stream channel. Promote scouring of thalweg to increase spawning habitat. Increase recruitment while providing additional cover for juvenile and adult fish.

Stream Habitat Impairments: Limited access due to dense tag alder growth. A few areas in stream project area had silted bottom and lack of woody cover. Mean stream channel width is too wide.

Target Species: Brook trout

Technique or Structure: brush removal (3907 ft.), Brush bundle/mattresses (3907 ft.),

Partners: Trout Unlimited donated gift account for a Brush Crew which assisted in completion of project

Comments and Accomplishments: Project complete

Noisy Creek (9) - Oneida

Project Length: 900 Feet

Fiscal Year: 2014

Justification and Purpose: Remove tag alder canopy over stream and open up corridor for angling. Use cut tag alder for brush bundling in strategic locations to promote stream channel cutting and improve cover for trout.

Stream Habitat Impairments: Limited access due to dense tag alder growth. A few areas in stream project area had silted bottom and lacked woody cover.

Target Species: Brook and brown trout

Technique or Structure: Brush bundle/mattresses

Prairie River (10) - Lincoln

Site: Downstream from R and H Road

Fiscal Year: 2013 and 2014

Project Length: 4,171 Feet

Justification and Purpose: Remove tag alder canopy over stream and open up corridor for angling, increase light penetration to increase productivity of stream, and remove tags from water to increase flow.

Stream Habitat Impairments: Limited access due to dense tag alder growth. A few areas in stream project area had silted bottom and lack of woody cover.

Target Species: Brook trout

Technique or Structure: brush removal (4,171 ft.)

Partners: Trout Unlimited donated gift account for a Brush Crew which assisted in completion of project

Comments and Accomplishments: Project complete

Site: Upstream from R and H Road

Fiscal Year: 2013 and 2014

Project Length: 1,742 Feet

Justification and Purpose: Remove tag alder canopy over stream and open up corridor for angling, increase light penetration to increase productivity of stream, and remove tags from water to increase flow.

Stream Habitat Impairments: Limited access due to dense tag alder growth. A few areas in stream project area had silted bottom and lack of woody cover.

Target Species: Brook trout

Technique or Structure: brush removal (1,742 ft.)

Partners: Trout Unlimited donated gift account for a Brush Crew which assisted in completion of project

Comments and Accomplishments: Project complete

Spring Brook (11) - Langlade

Site: Dog Pound – Upstream from Virginia Ave.

Project Length: 1,214 Feet

Fiscal Year: 2014

Justification and Purpose: Remove tag alder canopy over stream and open up corridor for angling, increase light penetration to increase productivity of stream, and remove tags from water to increase flow.

Stream Habitat Impairments: Limited access due to dense tag alder growth. A few areas in stream project area had silted bottom and lack of woody cover.

Target Species: Brook and brown trout

Technique or Structure: brush removal (1,214 ft.)

Partners: Trout Unlimited donated gift account for a Brush Crew which assisted in completion of project

Comments and Accomplishments: project complete



Spring Creek (Lincoln County) – channel shaping and log jam installation.

Spring Creek (12) - Langlade County

Site: Conn's Lane

Fiscal Year: 2013

Project Length: 686 Feet

Justification and Purpose: Remove tag alder canopy over stream and open up corridor for angling, increase light penetration to increase productivity of stream, and remove tags from water to increase flow.

Stream Habitat Impairments: Limited access due to dense tag alder growth. A few areas in stream project area had silted bottom and lack of woody cover.

Target Species: Brook trout

Partners: Trout Unlimited donated gift account for a Brush Crew which assisted in completion of project

Technique or Structure: Brush bundle/mattresses (686 ft.)

Partners:



Spring Creek (Lincoln County) – Channel shaping and boulder clusters.

Spring Creek (13) - Lincoln County

Fiscal Year: 2013 and 2014

Project Length: 1,320 Feet

Justification and Purpose: Restore stream channel. Promote scouring of thalweg to increase spawning habitat. Increase recruitment while providing additional cover for juvenile and adult fish.

Stream Habitat Impairments: This stream has silted riffle and run areas, a lack of woody cover and mean stream channel width is too wide and shallow.

Target Species: Brook trout

Technique or Structure: Brush removal (1320 ft.), channel shaping (1320 ft.), Brush bundle/mattresses (1.3 acres), trees/rootwads (140), Boulder clusters (200)

Partners: Trout Unlimited donated gift account for a Brush Crew which assisted in completion of project

Comments and Accomplishments: Project complete

South Branch of the Oconto River (14) - Langlade

Site: Upstream and Downstream of Van Alstine Road

Fiscal Year: 2013

Project Length: 2,481 Feet

Justification and Purpose: Remove tag alder canopy over stream and open up corridor for angling, increase light penetration to increase productivity of stream, and remove tags from water to increase flow.

Stream Habitat Impairments: Limited access due to dense tag alder growth. A few areas in stream project area had silted bottom and lack of woody cover.

Target Species: Brook trout

Technique or Structure: brush removal (2,481 ft.)

Partners: Trout Unlimited donated gift account for a Brush Crew which assisted in completion of project

Comments and Accomplishments: Project complete

Antigo Area Beaver Control

Fiscal Year: 2013 and 2014

Justification and Purpose: Remove nuisance beaver and dams associated with past spring pond dredging and stream habitat improvement projects.

Stream Habitat Impairments: Beaver

Target Species: Brook trout

Technique or Structure: Beaver dam removal (60), beaver removal (11)



STATEWIDE BEAVER CONTROL

Fiscal Year: 2013 & 2014

The primary means of removal of beaver and beaver dams from selected coldwater streams in Northern Wisconsin is through a Cooperative Services Agreement with USDA-APHIS-Wildlife Services (WS). Costs are shared between the agencies. Other agencies, particularly the US Forest Service and a number of counties also cost share with WS for beaver and beaver dam removal from streams. These removals allow the specified streams to remain free-flowing and either protect or rehabilitate naturally the stream channels and hydraulic and physical characteristics maintaining coldwater stream ecosystems.

The cooperative services contract time periods correspond to the Federal fiscal year and run from October 1 to the following September 30. As such it spans two DNR fiscal reporting years. Most of the work is conducted in the North Administrative District although some work is done in the northern portion of the Western Administrative District and Eastern Administrative District. There is also a small amount of work conducted in the Southern Administrative District.

WS maintains complete records of the number of beaver and beaver dams removed from selected streams in each county. These records are reported monthly as well as annual summaries.

Numbers of beaver and dams removed annually has changed over time as more effective control was achieved on named trout streams. These results are trout stream specific. WS beaver and beaver dam removal operations are also seasonal and are conducted primarily during the months of April through mid-October on a calendar year basis. Effort is also not consistent across counties. This includes trout streams designated by both DNR and the US Forest Service; a coordinated effort between our two agencies to avoid duplication of effort for the same purpose of coldwater stream habitat protection.

For FY13 (July 1, 2012 through June 30, 2013) WS removed 692 beaver and 562 dams from trout streams for a total of \$136,300.

For FY14 (July 1, 2013 through June 30, 2014) WS removed 750 beaver and 655 dams from trout streams for a total of \$169,612.



Blue streams were monitored by APHIS WS or DNR. This is not a complete inventory of all statewide beaver management streams. Some streams may be missing.

Not all streams that were monitored had beaver and dams removed. All of the streams however were checked at least once by WS, DNR Fisheries and/or USFS staff utilizing fixed wing aircraft, foot travel or public reports of beaver dam presence. A complete report of beaver and beaver dams removed from specific trout streams during this reporting period is available as needed.



STATEWIDE TROUT CONTACTS

If you have any questions concerning specific projects in this report, please contact one of the people listed in that Field Unit.

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It is important to the Wisconsin Department of Natural Resources' Fisheries Management program that you find this document useful. To better meet this goal, direct your suggestions for improving this report to:

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For more information on trout fishing and other subjects, visit the DNR Web site at:

dnr.wi.gov

and search "trout fishing"



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